DOCUMENT RESUME

ED 336 138 JC 910 411

TITLE	Setting the National Agenda: Academic Achievement and Transfer. A Policy Statement and Background Paper about Transfer Education.
INSTITUTION	American Council on Education, Washington, DC. National Center for Academic Achievement and Transfer.
SPONS AGENCY	Ford Foundation, New York, N.Y.
PUB DATE	91
NOTE	62p.
AVAILABLE FROM	Publications Department T, American Council on Education, One Dupont Circle, Washington, DC 20036 ($10.00).
PUB TYPE	Viewpoints (Opinion/Position Papers, Essays, etc.) (120) -- Reports - Descriptive (141)
EDRS PRICE	MF01/PC03 Plus Postage.
DESCRIPTORS	*Academic Achievement; *Articulation (Education); College Administration; *College Planning; College Role; *College Transfer Students; Community Colleges; Higher Education; *Intercollegiate Cooperation; Role of Education; Teacher Role; *Transfer Policy; Two Year Colleges

ABSTRACT

Focusing on the academic dimensions of student transfer from two- to four-year institutions, this report seeks to provide a foundation for institutional and academic policy decisions affecting the transfer experience and student achievement. Part I presents a policy statement on academic achievement and transfer and a nine-point agenda for action. The agenda calls on two- and four-year institutions to: (1) establish a firm commitment to transfer; (2) enrich the connection between teaching and transfer; (3) revitalize academic relationships between institutions; (4) manage transfer more effectively; (5) identify and realize transfer goals; (6) inform students fully; (7) issue a clear public call for improved transfer; (8) acknowledge the importance of financial support; and (9) establish firm expectations of transfer students. Suggested activities for implementing each of the points are attached. Part II presents a background paper by James C. Palmer and Judith S. Eaton. The paper begins by examining the implications of transfer education for the mission and values of two- and four-year institutions. After reviewing existing research on student transfer, the paper examines strategies commonly used to improve transfer, including inter-institutional arrangements and special student services. The role of faculty in transfer is discussed next. After stressing the importance of building an empirical base to assess transfer improvement projects, concluding comments reviewing the implications of a reemphasis on transfer. A 116-item bibliography is included. (PAA)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

SETTING THE NATIONAL AGENDA: ACADEMIC ACHIEVEMENT AND TRANSFER

A Policy Statement and Background Paper About Transfer Education

"PERMISSION TO REPRODUCE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY

J. Eaton

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)."

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

TC 910411

American Council on Education
National Center for Academic Achievement & Transfer

BEST COPY AVAILABLE

TRANSFER EDUCATION COMMISSION

Florence B. Brawer, *Research Director*, Center for the Study of Community Colleges

Arthur M. Cohen, *President*, Center for the Study of Community Colleges and *Professor*, Graduate School of Education, University of California-Los Angeles

Alfredo G. de los Santos Jr., *Vice Chancellor for Educational Development*, Maricopa Community Colleges

John A. DiBiaggio, *President*, Michigan State University

Judith S. Eaton, *Vice President*, American Council on Education and *Director*, National Center for Academic Achievement and Transfer

Nolen M. Ellison, *Visiting Scholar*, American Association of Community and Junior Colleges

Vera King Farris, *President*, Stockton State College

Lee R. Kerschner, *Vice Chancellor*, Academic Affairs, California State University System

Robert H. McCabe, *President*, Miami-Dade Community College

David Mertes, *Chancellor*, California Community Colleges

Allan W. Ostar, *President*, American Association of State Colleges and Universities *(retired)*

Dale Parnell, *President*, American Association of Community and Junior Colleges *(retired)*

Frank H. T. Rhodes, *President*, Cornell University

Piedad Robertson, *Secretary of Education* for the Commonwealth of Massachusetts

Allen P. Splete, *President*, The Council of Independent Colleges

Donald M. Stewart, *President*, The College Board

Ronald J. Temple, *President*, Community College of Philadelphia

Ex Officio

James C. Palmer, *Acting Director*, Center for Community College Education, George Mason University

Aram L. Terzian, *Dean*, Division of Social and Behavioral Sciences and Human Service Careers, Community College of Philadelphia

SETTING THE NATIONAL AGENDA: ACADEMIC ACHIEVEMENT AND TRANSFER

A Policy Statement and Background Paper About Transfer Education

American Council on Education
National Center for Academic Achievement & Transfer

The National Center for Academic Achievement and Transfer of the American Council on Education wishes to thank The Ford Foundation for its generous support in the preparation and publication of this work.

Copyright © 1991 by
American Council on Education

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or by any information storage and retrieval system, without permission in writing from the Publisher.

American Council on Education
One Dupont Circle
Washington, D.C. 20036

Additional copies of this publication may be purchased from the American Council on Education for $10.00 postpaid. All orders must be prepaid by money order or check (made payable to the American Council on Education) and sent to:

Publications Department T
American Council on Education
One Dupont Circle
Washington, D.C. 20036

TABLE OF CONTENTS

Part I: Policy Statement

Preamble 1
Setting the National Agenda: Academic Achievement and Transfer 3
A Nine-Point National Agenda for Action 9
Appendix A: Suggested Activities 11

Part II: Background Paper

Introduction: Transfer as a Responsibility and Challenge 19
- Transfer and the Community College 19
- Implications for the Mission and Values of Community Colleges 21
- Implications for the Mission and Values of Four-Year Colleges 22

Research: What Do We Know About Transfer? 24
- What is the Magnitude of Transfer? 25
- Transfer Students as a Proportion of Baccalaureate Degree Recipients 25
- When do Students Transfer? 27
- Who Transfers? 28
- Institutional Effects on Transfer 32
- The Black Box 32

Strategies Commonly Used to Improve Transfer 34
- Interinstitutional Transfer Arrangements 34
- Student Services and Matriculation Reform 36
- Student Educational Aspirations 37

Transfer as an Academic Concern 38
- Faculty Involvement 38
- Benchmarks of Transfer Effectiveness 39
- Examining the Institutional Culture 40

Building an Empirical Base to Assess Transfer Improvement Projects 42
- Transfer Assembly Project 43
- National Effective Transfer Consortium 43
- Adopting a Standard Transfer Rate Definition 44

Conclusion: Implications of a Reemphasis on Transfer 47
- Reservations About the Renewed Interest in Transfer 47
- Improving Transfer: Not a Zero-Sum Game 48

Endnotes 50
References 51

Appendix 1: A Bibliography of Published Works on Transfer 53

Part I

❖

SETTING THE NATIONAL AGENDA: ACADEMIC ACHIEVEMENT AND TRANSFER

❖

Policy Statement

by
The Transfer Education Commission
of
The National Center for Academic Achievement & Transfer

PREAMBLE

Why a national agenda for academic achievement and transfer? Why now? Because we as a nation rely heavily on our higher education system to unlock the doors of opportunity, to foster equity, to promote success, and to encourage advancement by the full range of citizens. Because the quality of public life we seek requires a highly educated citizenry. Because our economic prosperity is uniquely dependent upon the effectiveness of our colleges and universities. Because, as a nation, we continue to value fairness, decency, and social justice.

America's community colleges in particular embody our hopes for the future. For millions of students, they are the entry point to higher education and thus serve as the avenue to intellectual and economic growth. Entry to four-year colleges or universities by community college students, i.e., transfer, is central to the realization of equal opportunity in education. Community colleges and universities must strengthen their curricular and instructional links so that qualified students can transfer easily and routinely, with full expectation of success upon transfer.

The policy offered here, Setting the National Agenda: Academic Achievement and Transfer, is designed to enhance social justice and promote the development of all students to their fullest potential. Its adoption will both serve the nation's interests and benefit millions of individual Americans.

SETTING THE NATIONAL AGENDA: ACADEMIC ACHIEVEMENT AND TRANSFER

❖ *Introduction*

This National Agenda for Academic Achievement and Transfer provides a foundation for important institutional and academic policy decisions affecting the transfer experience and student achievement. At the institutional level, the Agenda can assist teaching faculty and academic administrators. At the policy level, it can aid college and university presidents, governing boards and agencies, and state and federal elected and appointed officials.

The Agenda concentrates on the academic dimension of the transfer experience. Its nine points identify the academic practices and policy issues that must be addressed by two- and four-year institutions if teaching, learning, and student achievement are to encourage and reflect transfer success. It explores the state, regional, and national contexts in whicn the challenge of increased commitment to transfer must be met. A Background Paper on current thinking about transfer and transfer research accompanies the National Agenda.

The National Agenda's attention to academic practices and achievement—specifically, to the role of teaching and learning—provides a powerful supplement to the current strategies used to foster effective transfer. Two- and four-year institutions traditionally have relied heavily on articulation agreements and support services such as counseling to smooth the transfer process. In response to demands made by policymakers and the public for even more effective means to ensure both educational access and success upon transfer, colleges and universities are beginning to focus increased attention on the role of faculty and the classroom environment. Approaching transfer in terms of academic achievement can enhance efforts to guarantee that higher education functions as a catalyst for social, economic, and educational opportunity and success. This is especially the case for black, Hispanic, and low-income students who begin higher education in a community college.

Although the National Agenda pays particular attention to transfer as it affects these groups, the concepts and issues discussed here are applicable to all segments of the community college student population. And while the recommendations concentrate on the two-year/four-year relationship, they are of value to other forms of transfer, such as transfer between four-year schools or movement from four-year to two-year institutions.

❖ *The Need*

Three factors make academic achievement and transfer issues urgent:

1. The central role community colleges play in meeting national goals for *access* to higher education, especially for black, Hispanic, and low-income students. A large number of such students who go to college begin their higher education in a two-year institution.

2. The importance of student success in higher education to ensure that educational opportunity helps to achieve the national commitment to *equity* and social justice.

3. The increasing public demand for *quality* in higher education. This demand has raised expectations about the effectiveness of two-year institutions in helping students move successfully into four-year settings.

Community colleges are the nation's most accessible institutions. In 1989, they enrolled more than 5.7 million of the nation's 13 million college and university students — 43 percent of the total higher education student population. These institutions were designed to make higher education available to any individual with the interest and ability to attend college. Indeed, much of the enrollment growth in higher education over the past three decades has taken place in community colleges. Access and participation are the foundation upon which enhanced commitment to student achievement must be built. Transfer is an essential element of this foundation.

Access to higher education through community colleges has been especially important for minority students: In 1988, approximately half (more than 1 million) of all black, Hispanic, Asian American, and Native American higher education students were enrolled in community colleges. In fact, minority students account for more than 20 percent of all those enrolled in community colleges for credit. Thus, given their broad participation at two-year institutions, minorities are unusually dependent on successful transfer for achieving their educational goals.

Quality in higher education is judged in a variety of ways by educators and those outside the education community. The interest in quality in relation to transfer focuses on three indicators: the extent to which students moving from two-year to four-year schools are prepared to meet the collegiate expectations of the four-year institutions; the ease with which students are able to move from one institution to another; and the rate of baccalaureate degree attainment among transfer students compared to that among students native to the four-year institution. Quality, as measured by baccalaureate degree attainment among transfer students, also is an indicator of the success of community colleges in providing access, equity, and academic opportunity, especially for minority students.

If the country's major commitment to access, equity, and quality is to be met primarily through its community colleges, the path from these institutions to four-year schools needs to be wide, direct, and uncluttered. Successful transfer helps higher education meet the country's needs.

❖ *Commitment To Students And Academic Achievement*

The student is central to all efforts to enhance the transfer experience, but responsibility for the success of that experience is shared by individuals and organizations throughout and beyond the campus. Faculty and academic practices have the most immediate impact on the student transfer process. Counselors and administrators also affect students directly. Presidents have a special responsibility; they set the tone for transfer. Boards of trustees, local communities,

governors, state departments of education, state coordinating and governing boards, business leaders, and others all have an important investment in the success of students moving from two-year to four-year institutions. Regional accreditation agencies, national associations of higher education, and the federal government (through the United States Department of Education and the Congress) help to finance and monitor transfer activity.

Students have much to gain from improvements in the transfer process, especially through emphasis on academic practice, but only if barriers that impede transfer are eliminated. Given the complex nature of transfer, many potential barriers exist. Some are attitudinal: Two- and four-year professionals may not adequately value each other's work, and this can affect perceptions of student performance. Community college transfer students are too often viewed as less capable than their four-year counterparts.

Other barriers are institutional: Colleges and universities with large student populations rely heavily on bureaucratic forms of management, often leaving students discouraged by a plethora of confusing and conflicting rules, regulations, and requirements. Bureaucratic structures often lead to insensitive or mechanistic decision making, which places a special burden on students attempting to transfer. Many of these students have complex academic histories and personal circumstances that require sensitivity and close attention by administrative personnel.

Some barriers are financial: Students may not have the resources to move from two-year to four-year institutions, and available financial aid may prove inadequate. Finally, there are socialization barriers: Two-year college cultures vary significantly from those at four-year institutions, and many transfer students are poorly informed about and inadequately prepared to deal with these differences.

❖ *Campus Commitment To Academic Achievement And Transfer*

The success of any national agenda designed to promote energetic transfer efforts will begin—or end—on campus. Vigorous support is needed for an educational system in which student mobility is valued at the institutional level. Institutional change at two- and four-year institutions requires collaboration among college presidents, academic administrators, and faculty. Effective programs can emerge only from a commitment to transfer and a willingness to cooperate and share responsibility.

Collaboration among faculty at two- and four-year institutions is the central, essential element in successful transfer efforts. Community college and four-year faculty must exercise leadership by joining together to design curricula and set common academic expectations. *Faculty in two-year schools* are key to student transfer success in three ways: they participate, directly or indirectly, in the educational goals set by students; they help students develop the academic skills essential to success after transfer; and they are a critical source of encouragement to students to raise their aspirations and continue their education. *Faculty in four-year schools* are critical to student achievement after transfer: they must understand the academic, social, and cultural environment from which transfer students have emerged; and they can assist transfer students as they face adjustment challenges.

Presidents and academic administrators at two- and four-year institutions have an essential role to play in two respects: they are responsible for making successful transfer a high institutional priority and for setting an institutional tone regarding the importance of transfer; and they must provide leadership in establishing transfer goals and in fostering the commitment to transfer effectiveness and student progress. Their leadership should result in *policies and practices* that are adopted by governing boards of both two- and four-year schools that provide a coherent framework for managing and expediting transfer, as well as support for creativity and innovation. Devising policies and practices that ensure the institutionalization of transfer and strong encouragement for its enhancement is a fundamental administrative obligation.

Colleges and universities must be committed to *effectiveness in transfer*. This means setting transfer goals appropriate to two- and four-year institutions and conducting regular assessments of progress toward these goals. Comprehensive data collection and analysis are needed for institutions to clarify what constitutes sufficient transfer activity. Achieving transfer effectiveness also means encouraging students to set personal transfer goals. These goals may be realized either through successful completion of specific courses or through completion of degree programs. Policies and practices that promote student retention and encourage course and program completion further this agenda of student progress. At the same time, students help themselves when they assume personal responsibility for their educational futures by becoming fully informed about transfer practices and requirements and institutional expectations.

❖*Accreditation And Public Accountability*

While college and university campuses are the locus of transfer activity, the effectiveness of their efforts is influenced by decisions made by a variety of constituencies and agencies. Actions taken by others must facilitate transfer. At the same time, two- and four-year institutions must be accountable to these constituencies and agencies for their capacity to encourage and ensure transfer success. The challenge of managing the complex matter of transfer can be met only when clear lines of responsibility and authority are established within an institution and between the institution and those it serves.

Regional accreditation agencies play an important role by setting and evaluating institutional transfer goals and values. They are uniquely positioned to create demanding expectations of institutional transfer activity. Accreditation reviews help institutions determine the future direction of transfer activity. Institutions are held accountable for educational quality and educational effectiveness through the accreditation process. Accreditation associations, working with institutional leaders, can assure that two- and four-year institutions invest sufficient resources in successful transfer and student progress. This can be done by making effective transfer a high priority and by requiring institutions to set transfer goals, monitoring institutional progress toward meeting them, and assuring changes in institutional practice when goals are not met. The commitment of governing boards to meeting the standards set through the accreditation process is a critical element in fostering responsible institutional transfer behavior.

States are the largest single source of financial support for public higher education. They also have a significant impact on the financial resources of private institutions. *State policy commitment* to transfer is essential. States can assign a high priority to successful transfer articulation agreements, set expectations for transfer activity between and among institutions, ensure financial support for transfer efforts, and recognize and reward success in expanding transfer. For example, state policymakers and legislators have awarded increased appropriations to two- and four-year institutions that enroll large numbers of students. They can also use transfer success as a standard to reward institutions for student achievement.

The federal government can play a major role in encouraging and supporting ambitious educational goals for all populations by adequately funding student financial aid programs and by consistently stating a public commitment to the importance of educational accomplishment through transfer. *Sustained financial assistance to students* is especially necessary to low-income students who begin the collegiate experience in a community college and wish to pursue their baccalaureate degrees. Such assistance, accompanied by *declarations of the importance of educational achievement*, provides a strong incentive to students and institutions alike.

A NINE-POINT NATIONAL AGENDA FOR ACTION

We Call Upon Two- And Four-Year Colleges To:

1. **Establish A Firm Institutional Commitment To Transfer.** Two- and four-year institutions should explicitly declare that transfer is an important institutional priority and that institutional investment in expanding academic achievement and transfer is essential. Presidents should issue direct, forceful written statements about the importance of transfer, about transfer as a central organizational value and priority, and about the institutional commitment to transfer goals.

2. **Enrich The Connection Between Teaching And Transfer.** Two- and four-year institutions should establish the primacy of faculty work with students and move to strengthen the relationship between teaching and transfer. Such an approach includes expanding the role and responsibility of classroom faculty in assisting students in decision making about transfer and in establishing clear transfer goals. Schools also should encourage the development of shared two-year/four-year faculty expectations about curricula and academic performance.

3. **Revitalize Academic Relationships Between Institutions.** Academic administrators and faculty at two- and four-year colleges should reinvest in the academic relationship between faculty and across academic departments. Particular attention should be paid to program coherence across institutions. Common expectations, academic achievement, the benefits of structured transfer programs, and needed transfer skills should be emphasized, and unique efforts by two- and four-year campuses—with their varying curricular contributions—should be respected and valued. Stressing these elements would lay the foundation for a new conversation between institutions.

4. **Manage Transfer More Effectively.** Two- and four-year campuses should focus significant attention on organizing their institutional operations to strengthen transfer; assigning responsibility and accountability for transfer activity to specific faculty, counselors, and administrators; and making available to students meaningful, comprehensive information about transfer.

5. **Identify And Realize Transfer Goals.** Two- and four-year institutions should make a major commitment to transfer effectiveness by establishing formal, written transfer goals and by creating an institutional information system that will generate the data necessary to assess the progress toward those goals, according to readily understandable definitions.

We Call Upon Institutional Governing Boards, Regional Accreditation Bodies, States, And The Nation To:

6. **Inform Students Fully.** Governing boards and accreditation agencies should require two- and four-year colleges alike to disclose public agreements on requirements for transfer and to accept courses at full faith and credit. Students themselves have a responsibility to select the curricular path that properly fits their aspirations. But that path must be made fully and clearly known to them, and it must be accessible.

7. **Issue A Clear Public Call For Improved Transfer.** Governing boards, states, and the federal government should proclaim clearly and firmly their ambitious and demanding expectations of student progress through transfer. Broad statements of public policy commitment to transfer are needed to support and encourage institutional efforts to increase the importance and effectiveness of transfer.

8. **Acknowledge The Importance Of Financial Support.** The lack of financial assistance must not be a barrier to transfer. Policymakers and officials should designate institutional and public funds to aid students who pursue transfer goals, whether by reallocating existing resources or by providing new funding. This financial support should be made widely available. Transfer students need to enjoy at least the same levels of assistance that are available to those who begin their college careers at four-year institutions.

9. **Establish Firm Expectations Of Transfer Success.** Accreditation agencies and governing boards must hold institutions accountable for transfer success—for making transfer happen. They should develop accreditation expectations and institutional policies that prompt institutions to: 1) assign high priority to effective transfer; 2) establish transfer goals; 3) maintain a clear policy commitment to the acceptance of transfer credits; 4) ensure the quality of the transfer experience; and 5) expand efforts to build academic relationships between faculty and departments at two- and four-year schools.

The nine-point National Agenda is built upon a sense of urgency concerning higher education's responsibility for educational mobility and achievement. It focuses on the central role of teaching and learning in the realization of transfer goals. It recognizes the profound responsibility of faculty and academic administrators in the transfer experience, and the need for support and assistance from governing boards, states, the federal government, national associations, and accreditation bodies. The enhancement of academic achievement and transfer is a shared responsibility; institutional change will take place only if all parties meet their obligations. Most of all, educational advancement through the transfer process is critically important to students and to the nation.

This National Agenda is only a beginning. The nation's system of higher education has a key role to play if we are to realize our democratic ideals of equality, justice, and opportunity. The National Agenda provides direction for future efforts by that system. It is an agenda of hope for a better future for all Americans through access to higher education and improved student achievement.

APPENDIX A

Suggested Activities To Implement The Nine-Point Agenda

How institutions adopt and implement the National Agenda for Academic Achievement and Transfer will vary from campus to campus and institution to institution. The following activities are intended to be a guide for two- and four-year colleges and universities as they consider and fashion their own responses to the nine-point agenda.

1. **Establish A Firm Institutional Commitment To Transfer**

   - Conduct institutional transfer audit to determine campus support for and responsiveness to transfer initiatives;
   - Develop presidential plan for transfer enhancement;
   - Establish transfer as key strategic planning priority;
   - Adopt transfer as key goal for all major administrative units.

2. **Enrich The Connection Between Teaching And Transfer**

   - Establish a task force on teaching and transfer;
   - Launch faculty development programs on teaching and transfer;
   - Develop faculty mentor program for transfer students.

3. **Revitalize Academic Relationships Between Institutions**

   - Establish two-year/four-year curriculum development task forces;
   - Expand existing departmental and program agreements between institutions;
   - Initiate standards review program whereby two- and four-year faculty develop common expectations of academic performance;
   - Formally identify faculty and administrative leaders who are key to transfer efforts.

4. **Manage Transfer More Effectively**

   - Develop transfer management plans at two- and four-year levels;
   - Initiate interinstitutional transfer management programs to coordinate transfer management plans at each institution;
   - Establish management review practices to monitor transfer management plans.

5. **Identify And Realize Transfer Goals**

   - Set institutional transfer goals based on campus commitment to transfer in the context of community and student need;
   - Revise, where appropriate, institutional data collection and analysis practices to evaluate institutional performance in relation to transfer goals;
   - Develop annual transfer information report.

6. **Inform Students Fully**

   - Review and upgrade existing transfer information available to students, including admission requirements, degree requirements, course equivalencies, and graduation requirements;
   - Explore student use of electronic transfer information systems and data exchanges, including transcripts and admission, course, program, and degree requirements;
   - Maintain multi-year transfer arrangements regarding courses and programs.

7. **Issue A Clear Public Call For Improved Transfer**

   - Craft statements of institutional transfer expectations for governing boards;
   - Develop state programs of transfer expectations;
   - Issue national statements of transfer expectations endorsed by nationally based higher education associations, organizations, and other interested parties;
   - Add transfer expectations to regional accreditation self-study and review.

8. Acknowledge The Importance Of Financial Support

- Assess availability of institutional and federal student aid that supports transfer for institutions and students;
- Develop institutional and state financial incentive plans to enhance transfer;
- Review and revise student aid programs to increase financial support for transfer.

9. Establish Firm Expectations Of Transfer Success

- Develop and monitor profiles of institutional transfer effectiveness plans by regional accreditation bodies;
- Issue major public statements about the importance of transfer to institutional effectiveness.

Part II

❖

BUILDING THE NATIONAL AGENDA FOR TRANSFER: A BACKGROUND PAPER

❖

James C. Palmer
Center for Community College Education
George Mason University

and

Judith S. Eaton
National Center for Academic Achievement & Transfer
American Council on Education

15/16

PREFACE

If we are to ensure the maximum benefit of the community college experience—especially for low-income and minority students—careful scrutiny, evaluation, and strengthening of all dimensions of institutional transfer activity are essential. Enhanced commitment to academic achievement and transfer is a key factor in honoring higher education's obligation to low-income and minority students who enter colleges and universities through the community college.

Building the National Agenda for Transfer: A Background Paper provides an overview of key transfer issues, prevailing strategies for effective transfer, and current research on transfer. It describes and analyzes higher education's current and future national commitment to the transfer function.

INTRODUCTION: TRANSFER AS A RESPONSIBILITY AND CHALLENGE

Student movement between colleges and universities is a defining characteristic of contemporary American higher education. Much of this movement is linear, with students attending different institutions as they advance toward their degree goals. Examples include students who transfer from a community college to a four-year institution or, at the graduate level, students who pursue a masters degree at one college or university and a doctoral program at another. Lateral student movement from four-year college to four-year college or from community college to community college is also common, as is the "reverse transfer" pattern of the student who moves from a four-year college to a two-year institution. Sometimes student movement is circular, as evidenced by the "reverse transfer" student who returns to a baccalaureate-granting institution or by the four-year college student who enrolls periodically at a community college to upgrade basic skills or to take selected courses that meet bachelor's degree requirements.

These patterns of student movement, along with opportunities for concurrent enrollment at two or more institutions, underscore the fact that no one sector of higher education operates in isolation; at both the undergraduate and graduate levels, students frequently attend more than one college or university. In many cases, the opportunity to move between institutions is a convenience for the student seeking out colleges whose programs best suit his or her needs or for those whose life circumstances make it difficult to complete a program of study at one location. In other cases, however, transfer is a requisite to advancement through the graded system of education. For example, those moving from two-year colleges to four-year institutions to graduate schools use different institutions as parts of an ordered sequence toward the fulfillment of degree goals. The sequential use of institutions recasts the issue of student movement between colleges from one dealing with student convenience and institutional flexibility to one dealing with the responsibilities of higher education institutions to work jointly in ways that maximize opportunity for student degree completion.

❖ *Transfer and the Community College*

This paper focuses on the latter phenomenon and reviews current issues in research and practice relative to the community college transfer function. For community college students pursuing the baccalaureate, transfer is not an option or a convenience (as it is for undergraduates at four-year colleges or universities); it is mandatory, made necessary by the structure of the higher education system itself. Within this framework, student transfer from community colleges to four-year institutions has emerged as a corollary to three themes guiding discussions about higher education in the 1980s: social justice, accountability, and the concern that access to education translate into actual student achievement.

The concern for social justice derives from the fact that educational achievement contributes to upward social and economic mobility. Because community colleges enroll almost 50 percent of

all minority college students in the United States *(see Table One)*, as well as a large number of students from low socioeconomic backgrounds, the community college transfer function plays a large role in educational opportunity for individuals within these groups. For many of the most disadvantaged in our society, transfer from two-year to four-year colleges is a requisite to educational advancement and to the attainment of the social and economic benefits that accrue to those with baccalaureate or higher degrees.

Table One
Percent Distribution of Minority Students in Higher Education
By Type of Institution
Fall 1988

	Ethnicity					
% Enrolled in:	White	Black	Hispanic	Asian	Native American	All Minority
Two-Year Colleges	36%	42%	56%	40%	54%	46%
Four-Year Colleges	64%	58%	44%	60%	46%	54%
Total:	100%	100%	100%	100%	100%	100%

Source: Schantz and Brown, 1990

The second issue, accountability, is tied to public concern about the return on investment in higher education and is reflected in government mandates that require colleges to document student outcomes. With rising tuition rates and fears that low- and even middle-income students might be priced out of higher education altogether, the public has grown increasingly skeptical about the benefits of a college education. The perceived failure of American education to produce the skilled and resourceful work force needed in today's competitive, international economy has contributed to this skepticism by raising questions about the ability of colleges and universities to provide students with the intellectual, social, and career competencies that historically are associated with the college-educated. As a result, the higher education community is under tremendous pressure to justify its claim to an ever larger share of scarce public resources. To the extent that transfer is an expected outcome of community college education and hence an

expected part of the return on the public's investment in education, documentation of transfer effectiveness will be part of this justification process.

The third theme, which focuses on the link between educational opportunity and student achievement, is related to both the social justice and the accountability issues. During the 1960s and 1970s, access to education was viewed as a noble end unto itself; few questioned the results of open access to community colleges, few asked if opportunity to enroll in college translated into student degree attainment. During the 1980s, however, many came to the conclusion that access could be justified only if it led to genuine student achievement. Access to educational experiences without subsequent degree completion was viewed as a hollow promise that undermined the integrity of the collegiate institution and the seriousness of its commitment to social justice. Because transfer is a requisite to the academic success of many community college students, careful scrutiny of the transfer function naturally followed, along with a growing determination to assure that access at entrance led to achievement in the form of degree completion.

The concerns for social justice, accountability, and student achievement have led educators to examine the community college transfer function from several angles. Many have turned their attention to longitudinal studies that examine the rate at which community college students transfer to baccalaureate-granting institutions and the factors that are correlated with successful transfer and eventual attainment of the bachelor's degree. Others have studied the mechanics of transfer, focusing on articulation agreements and on the ways community colleges can help their students negotiate the transfer process, usually through the provision of information on the admissions requirements of receiving four-year colleges. Finally, others have viewed transfer within the larger context of teaching and learning. Within this academic context, transfer is a product of the institutional cultures that shape the student's learning experience at two- and four-year colleges; improvement of transfer opportunities requires educators to critically examine the underlying assumptions of those cultures and the ways those assumptions may act as barriers to transfer and baccalaureate attainment.

❖ *Implications for the Mission and Values of Community Colleges*

The present-day community college mission is a product of both the history of the two-year college and the institution's evolving self-image. Historically, the community college of the 1990s is the result of the junior college of the early twentieth century, the expanding paraprofessional job market of the post-World War II era, and the more recent emergence of developmental and remedial education as a collegiate responsibility. The mission of the community college is thus an amalgam of commitments—to the liberal arts, to career education, to transfer education, and to compensatory education.

All of these tasks have been undertaken within a local, community-based context stressing three themes: access, responsiveness, and comprehensiveness. Access to education for all who can benefit from it is the central, defining characteristic of the community college. It is the most fiercely defended tenet of these institutions, and it sets the community college apart from institutions of higher education that have selective admissions policies. Community college educators also value responsiveness to local educational needs. Programming—whether in the form of new

degree programs for the job market, training programs to develop work skills, or literacy efforts—is viewed as a form of community service, one that changes in response to shifting educational demands. Comprehensiveness in the curriculum is a key element of accessible and responsive community service. If all are to be served, a variety of offerings must be available: remedial education for those upgrading basic skills; career education for those seeking an entry into the job market or for those upgrading skills needed in current employment; courses in family life, citizenship, the arts, and other subjects for those fulfilling a personal interest; and lower division courses for those pursuing a baccalaureate.

The renewed emphasis on transfer education challenges community college educators to reconsider, if not to change, the institution's mission and values. Can transfer, which requires carefully developed and prescriptive curricular sequences, thrive at an institution committed to the provision of courses that respond to the occasional educational needs of lifelong learners? Is the prevailing notion of comprehensiveness, built on a segmented curriculum that relegates transfer to the liberal arts and sciences and job training to career or vocational courses, realistic in light of the fact that transfer is an activity undertaken by students across all program distinctions, including so-called "terminal" programs? Finally, can community college educators reconcile the role of the open-access institution that welcomes all who apply, including the academically unprepared, with the role of the institution that leads students to the baccalaureate? Will an emphasis on transfer lead to more restrictive admissions policies that favor the admission of those who are more likely to succeed? Adequate consideration of these questions is beyond the scope of this paper. But they illustrate the point that efforts to increase transfer opportunities may lead to difficult, critical appraisals of long-held assumptions.

❖ *Implications for the Mission and Values of Four-Year Colleges*

Because transfer education is often viewed primarily as a community college responsibility, relatively little attention has been paid to the role four-year colleges play in maximizing transfer opportunities for community college students. An emphasis on transfer will nonetheless require four-year college educators to reexamine their own values. One area that may need consideration, for example, is the mix of teaching, research, and service in the institutional mission. As the 1990s begin, the balance between teaching and research in four-year colleges is undergoing significant scrutiny to assure that attention to the latter does not diminish the former. The extent to which undergraduate teaching is rewarded varies greatly among private liberal arts colleges, state colleges and universities, land grant schools, and research universities. But because transfer is tied to the undergraduate teaching mission, calls for improved transfer relationships between two-year and baccalaureate-granting institutions may increase pressure on four-year college educators to devote more attention to effective teaching.

Transfer may also lead to an investigation of the four-year college's emphasis on selective admissions and of the value placed by these institutions on providing unique undergraduate experiences that are distinctively identified with the degree-granting schools. Educators at four-year colleges may regard their own native students more favorably than those transferring from community colleges. Transfer students may be viewed as academically suspect, especially if they were not originally eligible to enroll at the four-year college under its selective admissions

policies. They may be seen as low achievers and, more significantly, as intruders who interfere with the unique and exclusive undergraduate experience on which some four-year colleges pride themselves. As a result, four-year college educators may question the appropriateness of awarding degrees to students who have experienced only part of the college's four-year process.

Efforts to improve transfer, then, will move four-year college educators to reconsider selective admission practices that make few provisions for community college transfer students. Improvement in transfer will also require four-year college educators to build more cooperative relationships with two-year institutions and to reconsider the extent to which the degree offered by a four-year college represents a unique educational experience that requires all four undergraduate years. Finally, transfer should also be part of the debate about the importance of undergraduate teaching in relation to research. Though relatively little has been written about the role four-year colleges play in promoting transfer, this should change as educators expand their view of transfer from one that focuses on the role of the community college to one that focuses on the responsibilities of higher education as a whole.

❖ *Summary*

Because transfer is tied to larger issues surrounding contemporary American higher education, and because the renewed emphasis on transfer challenges institutional assumptions and values, study of the community college transfer function has assumed increased importance. Drawing upon commentary and research in the literature, this background paper is designed as a resource that can inform debates about the community college transfer function, its role in baccalaureate education, and the ways transfer opportunities for community college students can be improved. While not exhaustive, the paper summarizes major research findings about transfer, and reviews the ways educators have sought to increase transfer opportunities for community college students. Because transfer is a function of teaching and learning generally and not simply a procedural matter dealing with program articulation and credit transfer, the paper also discusses an academic model for transfer that requires two- and four-year colleges alike to examine the ways curricula, pedagogy, and academic standards shape transfer opportunities for community college students. Finally, the paper examines problems in assessing college impact on transfer and reviews current efforts to define and report transfer rates according to consistent methodologies.

RESEARCH: WHAT DO WE KNOW ABOUT TRANSFER?

Though transfer is tied to the compelling issues of social justice, accountability, and achievement, research into the scope of transfer activity and the correlates of successful transfer is still at a pioneering stage. The lack of data that is collected consistently according to standard definitions makes it difficult to analyze trends in transfer. Current data collection practices in higher education, which focus on cross-sectional data such as the number of students enrolled at any one time or the number of degrees awarded in a given academic year, are of little help in analyzing transfer or other student outcomes. Few colleges array student data longitudinally to provide insights into the progress students make in college; where such longitudinal data sets *are* available, they are rarely tied to the information systems of four-year colleges and thus rarely provide information on either the proportion of students who transfer or their subsequent progress toward the baccalaureate. As a result, efforts to maximize transfer opportunities for minorities and others who use community colleges as an entrance to undergraduate higher education are based on untested assumptions rather than on evidence of what actually works.

Nonetheless, several studies conducted during the 1980s provide insights into the magnitude of transfer and the characteristics of transfer students. While a few of these studies were based on state data, most relied on secondary analyses of two national longitudinal databases developed by the U. S. Department of Education: the *National Longitudinal Study of the High School Class of 1972* (NLS 72), which involved a national sample of students who were high school seniors in 1971-72; and the *High School and Beyond* (HSB) study, which involved a sample of students who were high school seniors in 1979-80.[1] These studies yield valuable descriptive information that supports four premises about the nature of community college transfer education:

- that transfer is key to the collegiate experiences of a significant proportion of those who enroll in community colleges and of those who earn the baccalaureate;
- that the community college contribution to baccalaureate education is variable, because of the tendency of students to transfer at different points of time;
- that some students, particularly those who exhibit poor academic skills or who come from low socioeconomic backgrounds, may find transfer to be a more difficult process than other students; and
- that transfer success is a function both of institutional characteristics and of student background and educational experience.

❖ *What is the Magnitude of Transfer?*

Researchers calculating transfer rates for students entering community colleges have had remarkably similar results, indicating that approximately 20 to 29 percent of these students eventually enroll at a four-year college (with or without an associate degree). For example, Adelman (1988) traced the postsecondary experiences of students who were high school seniors in 1972 over a 12-year period. He determined that one out of five students who enrolled at a community college eventually showed up at a four-year institution. In another study, Lee and Frank (1990) examined the college attendance patterns of students who were high school seniors in 1980, and determined that of those entering a community college within two years of high school graduation, 24 percent were enrolled at a four-year college in the second, third or fourth years after high school graduation. Grubb (1990a, 1991) analyzed both the 1972 and 1980 cohorts, and concluded that the transfer rate was 29 percent for the former and 20 percent for the latter. His study suggests that transfer rates may have fallen significantly between the early 1970s and the early 1980s.

While similarity in findings may be partially explained by the fact that the researchers were, after all, using the same databases, it is interesting to note that other researchers using different data sets have come to the same conclusion. The aggregate transfer rates calculated by both the Transfer Assembly project and the National Effective Transfer Consortium (discussed later in this paper) hover at 25 percent. During 1990-91, 114 community colleges participating in the Transfer Assembly project calculated transfer rates for first-time students who entered their colleges in the fall of 1985. The average transfer rate for the colleges was 23 percent, with a range of approximately 2 to 78 percent (Cohen, 1991). Twenty-eight community colleges participating in the National Effective Transfer Consortium calculated transfer rates for the cohort of students who were enrolled in the spring of 1988 but who did not reenroll in the fall of 1988; the average transfer rate for these "leavers" was 25 percent, with a range of 12 to 40 percent (Berman and others, 1990).

Numerous transfer rates based on analyses of state and local data have been reported in the literature (Cohen, 1990). These rates are as varied as the methodologies used to compute them. But from a national perspective, there is evidence to support the hypothesis that, on average, at least one out of five community college students transfers. Table Two *(see following page)* summarizes these national transfer rates and the cohorts for which they were calculated.

❖ *Transfer Students as a Proportion of Baccalaureate Degree Recipients*

Some researchers have provided another measure of the magnitude of transfer by calculating the percentage of baccalaureate degree recipients who attended a community college at some point during the course of their undergraduate careers. Using the Department of Education's national databases, for example, Grubb (1990a, 1991) determined that 9 percent of the 1972 high school graduates who received bachelor's degrees by 1976 started their postsecondary education at a community college, as compared to 7 percent of the 1980 high school graduates who received bachelor's degrees by 1984. State studies, where they exist, show higher percentages, calculated as the proportion of baccalaureate graduates who transferred at least some credit from a commu-

Table Two
Average Transfer Rates Emerging In National Studies

Study Source	Data	Cohort For Which Transfer Rate Applies	Mean Transfer Rate
Transfer Assembly (Cohen, 1991)	Students at 114 two-year colleges with minority enrollments of at least 20%	Students who enrolled at the colleges with no prior college experience in the Fall of 1985 and who earned at least 12 college-level credits within 4 yrs	23%
National Effective Transfer Consortium (Berman and others, 1990)	Students enrolled at the 28 member institutions of the NETC	Students who were enrolled at the colleges in the spring of 1988, who had completed at elast six credits by the end of the spring 1988 term and who did not reenroll in the fall of 1988	25%
Lee and Frank (1990)	High School & Beyond	1980 high school graduates who enrolled at a community college at some point in the first two years after high school graduation	24%
Grubb (1990a; 1991)	High School & Beyond	1980 high school graduates who started their postsecondary careers at two-year colleges	20%
Grubb (1990a; 1991)	NLS 72	1972 high school graduates who started their postsecondary careers at two-year colleges	29%
Adelman (1988)	NLS 72	1972 high school graduates who enrolled at a community college at any point through 1984	21%

Note: Besides different cohorts, the researchers cited above used different time frames within which transfer took place. See text under "What is the Magnitude of Transfer" (preceding page) for further information.

nity college during the course of their undergraduate careers. The Washington State Board for Community College Education (1989), for example, determined that approximately one out of three students receiving bachelor's degrees from the state's four-year colleges in the spring of 1988 had transferred credit from a community college and that the proportions varied by type of institution; 22 percent of the graduates from private colleges were community college transfer students, as were 29 percent of the graduates from the University of Washington and Washington State University and 48 percent of the graduates from the state's regional four-year colleges. Data from California show a similar pattern, revealing that community college transfer students made up approximately 20 percent of the University of California graduates and 49 percent of those graduating from the California State University (California State Postsecondary Education Commission, 1988).

These analyses demonstrate that the community college plays at least some role in the undergraduate education of many baccalaureate degree recipients, especially those at state colleges and universities. But they provide few insights into the nature of that role. The study conducted by the Washington State Board for Community Colleges (1989) notes that approximately 60 percent of the bachelor's degree recipients with community college credits had stayed long enough at the community college to earn the associate degree; the remaining 40 percent had earned any number of credits prior to transfer and had not received a community college credential. Clearly, students pursuing the baccalaureate use community colleges in different ways. Because community college students may transfer before completing an associate degree, the act of transfer itself does not signify that the student has met a specific standard of achievement. Thus, the community college contribution to the undergraduate education of those who go on to four-year colleges varies from student to student.

❖ *When Do Students Transfer?*

The variable community college role in baccalaureate education is underscored by research that shows that students transfer at almost any point after enrollment at the community college. Using the national NLS 72 and HSB databases, Grubb (1990a, p. 6) determined that of those students who transferred within four years of entering a community college, only a minority did so after earning a credential (36 percent of the transfer students in the 1972 cohort and 27 percent of those in the 1980 cohort). State studies provide other indices of the varying role of the community college as a way station to the university. For example, the Florida State Board of Community Colleges (1988) examined the backgrounds of former community college students who were enrolled in the Florida State University System during 1988, and determined that only 17.4 percent transferred fewer than 60 credits to the university; the remainder earned 60 units or more (some of which may have been earned at four-year colleges attended prior to enrolling at the community college). In Illinois, 38 percent of the community college students who transferred in 1979 to public and private senior institutions in the state did so with an associate degree; 31 percent had the associate degree in arts or science, while 7 percent had the vocational associate degree in applied science (Illinois Community College Board, 1986).

Given this variability, it is natural to question whether students are better off completing two full years at the community college before transferring. Some research indicates that the associate degree confers an advantage on transfer students. Longitudinal studies conducted in Illinois and Arizona suggest that transfer students with the associate degree (or its equivalent) outperform those without the degree in terms of both persistence at the four-year college and baccalaureate degree attainment (Richardson and Doucette, 1980; Illinois Community College Board, 1986). But Grubb's recent national analysis of the NLS 72 and HSB databases suggests that the advantage of the associate degree may have diminished. Comparing the educational experiences of the 1972 high school graduates with the 1980 graduates, he found that the baccalaureate attainment rate of transfer students with the associate in arts or associate in science degrees was 61 percent for the 1972 cohort but only 12 percent for the 1980 cohort. Though associate degree holders in both cohorts were more likely to transfer and earn a bachelor's degree than community college students who did not earn a credential, Grubb hypothesizes that the role of the associate degree as a path to the baccalaureate has been considerably weakened.[2]

Despite the evidence of these studies, they say little about how the associate degree does or does not confer an advantage on transfer students. The positive findings of the Arizona and Illinois studies may be due to the characteristics of associate degree holders themselves. Or, they may lose fewer credits in the transfer process because articulation agreements are often keyed to the associate degree, leaving the transfer of those without the credential open to the vagaries of interinstitutional negotiation. Those who have earned the associate degree may also be more self-directed and more sure of their educational goals than those who have not; certainly the completion of the degree indicates that the student can sustain a prolonged period of study and meet degree requirements. On the other hand, Grubb's conclusions raise disturbing questions about the value of the associate degree as a transfer credential. Perhaps his findings indicate that the positive correlation between the associate degree and performance at the upper division observed in the Illinois and Arizona studies was a product of local conditions that do not apply nationally. Should students earn the associate degree before transferring? Further research will be needed to answer this question.

❖ *Who Transfers?*

Research that examines the characteristics of community college students who transfer indicates that several variables are correlated with the likelihood that a student will move to a baccalaureate-granting institution. Among these variables are ethnicity, socioeconomic status, educational background, educational aspirations, and academic ability. The findings of the limited studies conducted to date are mixed. While some studies show that minorities, on average, have lower transfer rates than whites, those developing statistical models to predict transfer to the four-year college generally find that race fades as a statistically significant predictor, with socioeconomic status and academic variables showing the strongest correlation.

Using the NLS 72 and HSB databases, Grubb (1990a, 1991) demonstrated the correlation of most of these variables to transfer by calculating transfer rates for students with differing characteristics *(see Table Three)*. The results, he concluded, "are consistent with conventional patterns of

Table Three

Transfer Rates of High School Graduates Who Begin Postsecondary Studies at Community, Technical, and Junior Colleges

	Cohort	
	1980 High School Graduates	1972 High School Graduates
All Students	20.2%	28.7%
Male	24.6	30.6
Female	16.5	26.2
White	21.7	28.7
Black	10.2	27.1
Hispanic	15.7	25.9
Low Socioeconomic Status	12.6	20.6
Middle Socioeconomic Status	19.2	26.5
High Socioeconomic Status	28.0	38.2
Low Academic Ability	9.3	15.7
Middle Academic Ability	23.6	28.6
High Academic Ability	33.9	41.5
Curriculum in High School		
Academic Track	31.5	39.5
General Track	18.6	23.9
Vocational Track	9.3	13.7
Educational Aspirations		
Vocational/Technical Degree	6.8	8.9
Academic Degree, Less Than 4 Years	10.3	19.9
Bachelor's Degree	32.5	43.6
Graduate Degree	37.0	52.9

Source: Grubb, 1990a (Table 5, n.p.)

Note: The data are based on analyses of the National Longitudinal Study of the High School Class of 1972 (NLS 72) and the High School and Beyond (HSB) data bases.

progress through education, where minority students and those of low socioeconomic status are less likely to progress" (Grubb, 1990a, p. 8). Similar findings emerged in a study conducted by the Illinois Community College Board (1990) to determine who among the freshmen entering community colleges eventually earns a baccalaureate. When the characteristics (at entrance) of the cohort of first-time college students who enrolled in the Illinois community colleges are contrasted with the characteristics of those students within the cohort who earned a bachelor's degree from a public Illinois four-year college by 1988, the study shows that minorities were less likely to earn a baccalaureate than whites. Those earning the baccalaureate were also younger and were more likely to have initially enrolled on a full-time basis *(see Table Four)*.

Other researchers, including Valez and Javalgi (1987) and Lee and Frank (1990), have employed correlational techniques with the NLS 72 and HSB databases to develop statistical models that predict transfer. Variables related to socioeconomic status (SES) and ethnicity also emerged in these studies but in less direct ways. Valez and Javalgi noted that high-SES students are more likely to transfer than low-SES students, but that the statistical effect of socioeconomic background as a predictor of transfer is "of a modest magnitude" (p. 85) and that it is mitigated by other variables, such as high aspirations and good grades (p. 92). Lee and Frank also found a weak direct relationship between SES and transfer, but determined that the indirect effect of SES, as evidenced in the tendency of one's social background to affect aspirations and college behaviors, played a significant role. As for race, being a minority group member did not of itself emerge in the prediction models developed in either study as a statistical inhibitor of transfer. When controlling for other variables, Valez and Javalgi found that being black or Hispanic was in fact positively correlated with transfer. Lee and Frank found that minority students were less likely to transfer than whites, but that there were no direct statistical relationships between race and transfer in their prediction model. They also determined that the indirect effects of race on academic behavior were relatively small.

The indirect effect of ethnicity and socioeconomic status on transfer underscores the fact that these variables are intertwined with other student characteristics, notably academic ability. Grubb found that transfer rates were highest for those who had pursued an academic track in high school (rather than a vocational or general track) and for those with relatively high scores on tests of academic ability *(see Table Three)*. Valez and Javalgi provided corroborating evidence, suggesting that the best predictors of transfer are aspiration, academic background, and academic involvement. While both studies used different variables, they showed (in aggregate) that transfer students were more likely than nontransfers to have completed an academic track while in high school, to have received relatively high grades in high school and college, to have taken science and mathematics courses, and to have devoted more time to their studies (as evidenced by the number of hours spent on homework while in high school and on the number of credit hours earned while in college). Transfers were also more likely to have held a work-study job on campus and less likely to have expressed satisfaction with their work if employed. In addition, Lee and Frank found that while still in high school, transfers had indicated that they would enter the labor market at a significantly later point in time than nontransfers, thus demonstrating a predisposition to postpone work in favor of study. In short, the studies came to the unsurprising result that students who are more academically inclined transfer at higher rates than those who are less academically inclined.[3]

Table Four

Characteristics of First-Time College Students Entering the Illinois Community Colleges in 1980 Who Earned a Baccalaureate From Illinois Public Universities by 1988

	Students Entering Academic Programs		Students Entering Vocational Programs	
	Total Cohort	Those Earning Bachelor's Degrees	Total Cohort	Those Earning Bachelor's Degrees
% Who are				
Male	45%	53%	46%	55%
Female	55%	47%	54%	45%
Asian	2%	2%	2%	3%
Black	18%	5%	15%	6%
Hispanic	3%	1%	3%	1%
White	70%	87%	73%	84%
Other/Unknown	6%	4%	8%	6%
% Distribution by Age at Entrance in 1980				
20 or Younger	55%	84%	50%	77%
21-30	23%	10%	27%	14%
31 or older	22%	6%	23%	9%
Enrollment Status at Entrance in 1980				
Part-Time	55%	30%	55%	25%
Full-Time	45%	70%	45%	75%

Source: Illinois Community College Board, 1990; the percentages are derived from data presented on pages five and nine.

❖ *Institutional Effects On Transfer*

While researchers have examined the student characteristics that lead to transfer, few have analyzed the institutional factors that promote transfer success. Most studies treat community colleges as a unitary and hence homogeneous entity. Thus, the question of whether a student's probability of transfer is affected by the community college that he or she attends remains largely unanswered.[4]

Alba and Lavin (1981) provide at least some evidence of the differential impact of institutions on community college students. In their comparison of the academic achievement of students entering two-year and four-year colleges within the City University of New York (CUNY), they determined that community college students, despite controls for numerous variables, had lower persistence and graduation rates than those entering the freshman classes of four-year institutions. But there were significant variations among community colleges. As Alba and Lavin explain, "the academic chances of a student placed at one of CUNY's community colleges were not always worse than those of a similar student placed at a senior college; whether or not they were worse depended on which colleges were compared" (p. 229). In fact, students at two of the community colleges involved in the study were as successful as students at some of the senior colleges, and the researchers were not able to discover any distinguishing characteristic of these colleges that could "explain the relative success of their students" (p. 230). These variations did not negate the overall finding that entrance in a community college generally diminished the student's chances of degree attainment. But the observed variations among community colleges point to the likelihood that there are institutional factors that account for at least some degree of variance in student transfer success. Research into these factors would make a valuable contribution to our knowledge of the determinants of transfer.

❖ *The Black Box*

What institutional practices inhibit or promote student transfer from community colleges to four-year institutions? What factors contribute to the academic success and baccalaureate degree attainment of community college students once they enroll at the university? Current research, which provides indicators of the percentage and characteristics of students who transfer, says little about transfer as an educational process. It suggests that some students, particularly those with poor academic backgrounds and those from low socioeconomic backgrounds, have lower transfer rates than academically talented students or those from relatively affluent families. It confirms that students transfer with and without the associate degree, but provides only cursory evidence of the relative benefits of transfer after earning the associate degree versus transfer before completing the degree program. It substantiates the differential achievement of students who start their postsecondary careers at community colleges on the one hand and at four-year colleges on the other, but it rarely illuminates the processes that work for or against this achievement within and among community colleges. Students enter the community college and leave; despite available research, the process of transfer remains a "black-box" phenomenon (Cohen and others, 1985, p. 13).

In the absence of more illuminating data, questions about what promotes or deters transfer remain open to speculation. Lee and Frank (1990), for example, surmise that vocationalism may be one factor that contributes to the relatively low transfer rates of students with poor academic backgrounds. "We have no direct evidence to support or refute this idea," they note, "but it seems clear that although community colleges offer both academic and vocational programs, there is less thrust toward the academic than the vocational side of the curriculum, at least for students who are not already motivated and prepared to head in that [academic] direction" (p. 191). Grubb (1990a, 1991) attributes declining transfer rates between the 1970s and the early 1980s to a variety of factors that he speculates may have eroded the community college transfer function; these include the development of a flat curriculum with few courses beyond the introductory level, the increased tendency of students to "mill around" without pursuing a defined program of study, and the increased enrollment of high-risk students with relatively poor academic backgrounds. Dougherty (1987) hypothesizes that a number of other factors also work against the academic achievement and transfer of community college students: the lack of dormitories and the tendency of community college students to be less involved with campus life than their four-year counterparts; low selectivity, with the result that "students find themselves surrounded by peers who are not interested in academic work and who discourage those who are" (p.95); the tendency of overworked faculty at community colleges to limit their expectations of students; and the possibility that four-year colleges are inhospitable to community college transfers, making it difficult for these students to successfully integrate themselves into the culture of the baccalaureate-granting institution.

These are not random speculations. They are informed by the literature and by what is known about transfer activity. But they are nonetheless untested hypotheses. Research examining the relative merits of these hypotheses will be needed if we are to understand the determinants of successful transfer and to gauge the effectiveness with which college educators use their knowledge of these determinants to maximize transfer opportunities.

STRATEGIES COMMONLY USED TO IMPROVE TRANSFER

Growing attention to transfer during the 1980s spawned a renewed interest in institutional efforts to increase student transfer from community colleges to four-year institutions, especially among the large number of minorities attending two-year institutions. Several of these efforts have been backed by major foundation support. The Ford Foundation's multimillion dollar commitment to campus-based transfer improvement is an example. Among other projects, for example, Ford supported the Urban Community College Transfer Opportunities Program (UCCTOP), involving 23 urban community colleges with relatively large minority student populations in a variety of efforts aimed at boosting transfer rates (Center for the Study of Community Colleges, 1988). The American Association of Colleges, with support from the Andrew W. Mellon Foundation, has conducted similar work, funding public and private four-year colleges to work cooperatively with two-year institutions (Wechsler, 1989).

Several strategies have been employed in these and other projects to help students make the transition from community colleges to baccalaureate-granting institutions. Many seek to assure that students will be able to make informed decisions about transfer and that the credits they earn at the community college will be evaluated and recognized by four-year institutions in a consistent manner. At this level, articulation agreements governing the transfer of credits are the primary focus of attention, along with the provision of counseling support, course equivalency guides, and other services or information resources that help students understand and prepare for the entry requirements of receiving four-year colleges.

Other views of transfer, though less prevalent, have also emerged in transfer improvement efforts. Some rest on matriculation reform entailing entry placement and testing, the enforcement of academic standards, and other measures designed to assure that community college students follow a sequential, curricular path to the baccalaureate. Transfer as a function of student aspiration is also apparent in the arguments of those who call upon community college educators to raise the educational horizons of their students, especially those from low socioeconomic backgrounds who may come to the community college with unclear educational goals. The introduction of curricular concerns and the implied responsibility of educators to inspire their students transform the transfer issue from one that deals with admissions procedures and degree requirements to one that addresses the educational purpose of the community college and the ways educators approach their work with community college students.

❖ *Interinstitutional Transfer Arrangements*

Two-year and four-year colleges can work together in a number of ways to promote transfer. Most interinstitutional transfer arrangements, however, take the form of articulation agreements, which spell out the types of course credits community college students may transfer to four-year

colleges and the conditions under which that transfer may take place. Individual community colleges often work out articulation agreements with surrounding four-year institutions. While many simply catalog the community college courses that will be accepted at the baccalaureate-granting college, others detail the course of study a community college student should follow in order to transfer with junior standing as a major in a specific discipline. Sometimes these locally arranged agreements are developed under the umbrella of state-level articulation policies that are written into the state education code, issued as official policy of state higher education agencies, or developed on a voluntary basis by the different sectors of the state's higher education system. Where they exist, these policies, sometimes augmented by statewide common course numbering systems, attempt to provide a standard framework for transfer between all two-year and four-year colleges. Some are built around the associate degree or on the recognition of a commonly accepted core of lower-division general education credits. (See Kintzer and Wattenbarger, 1985, for a review of selected state policies.)

In developing articulation agreements and policies, colleges and states attempt to overcome at least three transfer barriers that are built into the segmented system of American higher education. One barrier is institutional autonomy and the right of individual colleges to set degree requirements that might be quite different from those set by other institutions. To the extent that they represent genuine cooperation between institutions, and not simply a listing of the community college classes for which four-year institutions will award credit, articulation agreements strike a balance between institutional prerogative and student opportunity to pursue degree goals by moving from one institution to another. A second barrier is the limited connection between the curricula of colleges that have, after all, evolved independently of one another. Some articulation agreements map out curricular ladders leading from admission to the community college to the receipt of a baccalaureate degree in a specific discipline; thus, they foster a "continuity of course work within and between institutions" (Wechsler, 1989, p. 9). The third barrier is the lack of a standard credential for transfer from two-year to four-year colleges. Because the associate degree has never been a requirement for transfer, the question of which community college students are admitted to the university is open-ended. Articulation agreements attempt to define transfer eligibility by anchoring transfer to predefined measures of student achievement, such as the completion of the associate degree or of a specified set of lower-division general education courses.

At a minimum, the existence of articulation agreements demonstrates a recognition of the interrelated roles colleges and universities play in helping students to achieve their educational goals. But because few researchers have examined the impact of articulation on transfer, the degree to which they actually succeed in breaking down transfer barriers is a matter of speculation. Much depends on the extent to which they are adopted in the first place and on the degree to which they represent genuine give-and-take between colleges. While these agreements may facilitate transfer, they may also limit transfer opportunity if enforced to the "letter of the law," thus thwarting institutional flexibility (Knoell, 1990).

❖ *Student Services and Matriculation Reform*

While articulation agreements address interinstitutional barriers to transfer by providing four-year colleges with mechanisms for recognizing and building upon the course work completed by community college students, they have little effect if prospective transfer students do not understand the assumptions of those agreements and plan their studies accordingly. Several factors, discussed by Cohen and Brawer (1987, pp. 99-100), suggest that leading students to this understanding will not be easy. Left to their own devices, they point out, few community college students have the knowledge or skills necessary to negotiate the transfer process. Many students have relatively poor academic backgrounds and have enrolled to prepare for direct employment; they show little interest in working over many years in an academic program that yields few immediate benefits. (This is supported by research, discussed earlier, regarding the student's academic background as a predictor of transfer.) Institutional practices, guided by an emphasis on access (with subsequent student progress a secondary concern), may also work against transfer by allowing students to use community colleges in unfocused ways. For example, the limited liberal arts courses offered at community colleges, with most courses at the introductory level and relatively few with prerequisites, suggest that the liberal arts have evolved at the community college as a series of electives and not as a sequentially ordered path to the baccalaureate.

Information on transfer opportunities and requirements is the tool most often used to help students understand the requisites of the transfer process. Wechsler (1989) notes that there are passive and active approaches to the delivery of information. The passive approach involves the general distribution of course equivalency guides, transfer brochures, or other publications that explain articulation agreements, describe transfer procedures, and provide information on related topics such as financial aid. These materials are sometimes made available in special counseling or transfer centers, such as those that have been established at many of the California community colleges (Farland and Anderson, 1989).[5] Active information dissemination strategies involve personal contacts with potential transfer students. In some cases, four-year colleges recruit these students by sending admissions officers to local community colleges or arranging for the students to visit their campuses.

Because transfer implies progressive advancement through a curriculum leading to the baccalaureate, efforts to inform students about the requisites of transfer have in some cases been supplemented by matriculation reforms involving entry testing and placement, the development of defined programs of study for each student, the tracking of student progress toward degree achievement or transfer, and the enforcement of standards of academic progress. Such reforms seek to replace casual student attendance and ad hoc course-taking patterns with student matriculation into a prescribed program of study leading to defined ends, including transfer. Thus, open admissions policies are recast within the framework of a contractual agreement between the student and the college. The college promises to provide suitable guidance, support services, and instruction. The student promises to make a good faith effort in maintaining satisfactory progress toward his or her educational goals (Palmer, 1989, pp. 3-5).

Curriculum development is a third approach to improving transfer. By reexamining and strengthening the curriculum, community colleges match matriculation with a rigorous collegiate experience that provides students with the skills necessary for achievement in the upper division.

For example, one of the colleges participating in the Ford Foundation's Urban Community College Transfer Opportunities Program initiated a project that focuses on "staff development leading to curriculum reform, with the faculty changing certain courses and building new ones so that students would be involved more in studying academic disciplines" (Center for the Study of Community Colleges, 1988, pp. iii-iv). This approach is a notable exception to the variety of transfer improvement strategies usually undertaken by community colleges. While two-year colleges often modify individual courses or programs to meet the requirements of receiving four-year colleges, those working on transfer issues rarely attend to the purposes and nature of the community college collegiate curriculum as a whole.

❖ *Student Educational Aspirations*

Is it enough for colleges to inform students of transfer opportunities, ease the process of transfer through articulation agreements, and initiate matriculation processes that provide direction to the student's educational experience? Some feel the answer is no and argue that to increase transfer rates, educators must help students—especially minorities and other disadvantaged groups—to raise their educational and career objectives. Noting that minority and disadvantaged students who are capable of doing baccalaureate-level work often enroll in programs leading to immediate employment, Knoell (1990) asserts that "Programs are needed that focus on increasing the students' levels of aspiration and motivation" (p. 66). As another example, Nora and Rendon (1990) agree that efforts to increase transfer may have little effect on students' predisposition to transfer, especially among minority students who may lack the networking or information-gathering skills that help students move from two-year to four-year colleges.

Relatively little attention has been given to the ways colleges can motivate students to transfer. One promising method involves mentoring programs that link former community college students who have transferred to prospective transfer students who are still enrolled at the community college. Another tactic is to reach out to high school students before they enroll in the community college, encouraging them to complete the academic courses required for successful admission to college and to think about the requirements and rewards of the bachelor's degree. But if colleges take on the task of motivating students to transfer, the greatest burden will fall on faculty, who have the most frequent contact with students. Wechsler (1989) notes that some of the four-year colleges participating in the American Association of College's transfer improvement project during the mid-1980s used alumni who teach at community colleges to identify prospective transfer students.

TRANSFER AS AN ACADEMIC CONCERN

Continued attention to articulation agreements and counseling services will certainly be needed as college educators attempt to bolster the community college transfer function. But these traditional strategies may be insufficient to maximize opportunity for transfer. They often address transfer as an auxiliary function of the higher education enterprise, one performed by student services officers or guidance counselors rather than by faculty or academic deans. They require students to learn about the transfer requirements set by receiving four-year colleges and about the standards of academic progress that must be met to achieve long-term educational goals. But they place little burden on the colleges themselves; they stress neither the need for an institutional commitment to transfer as an educational priority nor the obligation to monitor transfer rates or otherwise document transfer outcomes.

A more comprehensive approach to strengthening transfer can be achieved by viewing transfer as a function of the collegiate academic culture. An academic model for transfer, proposed by Eaton (1990), stresses the primacy of curriculum and instruction in developing effective transfer programs. It builds on the less prevalent attempts to shore up transfer through curriculum reform and matriculation and places responsibility for transfer squarely in the hands of those who design and teach courses and who thus help students develop the intellectual skills required for academic achievement. Given this emphasis, the academic model has three requisites: faculty involvement as key players in transfer improvement efforts; institutional commitment to the evaluation of transfer against predetermined benchmarks of transfer effectiveness; and a willingness to critically examine the institutional culture and its impact on opportunities for transfer.

❖ *Faculty Involvement*

The academic model assumes a close relationship between faculty and the success of the transfer function and emphasizes the connection between classroom practice and student transfer success, the critical role of collaboration between two-year and four-year college faculty in curriculum development, and the importance of perceiving transfer responsibility as an enterprise shared by teaching professionals at two- and four-year colleges. While administrative and policy commitment to transfer is important, students gain the most from those closest to them: classroom teachers. Thus, faculty must share responsibility for shaping the academic experiences that lead to transfer and subsequent student success in the upper division. This is particularly important in light of the research (discussed earlier) that suggests that students with relatively poor academic backgrounds have more difficulty transferring than students who come to the community college with a successful academic track record.

Because transfer is fundamentally an academic matter related to student intellectual achievement, classroom practices that shape the learning experiences of students are key to transfer success. The academic model therefore asks faculty to consider the relationship between transfer and the way they approach their jobs as teachers. It calls on faculty to evaluate the extent to which their teaching helps students build the skills needed for transfer, and it requires faculty to

extend their thinking beyond the immediate environment of the community college to the future educational challenges that students might undertake. Teaching under the academic model entails preparing students for the next step in their education, not simply leading students to successful conclusion of a single course or program.

This long-term view requires faculty to reorient their thinking about curriculum development and student performance. A major part of this reorientation must involve shifting their focus from the *institutional* to the *interinstitutional*. Traditionally, colleges have developed courses independently of one another, making changes in courses and degree requirements that sending or receiving institutions learn of only after the fact. This may lead to continual revisions of articulation agreements and to considerable confusion among prospective transfer students. The academic model, on the other hand, calls for collaborative work between two-year and four-year college faculty at the point of course development so that curriculum content and performance expectations are understood by both institutions and do not constitute unintended barriers to transfer. The faculty collaboration demanded by the academic model requires educators at two- and four-year colleges to view curriculum development as a shared task that balances the prerogatives of institutional autonomy with the needs of the student.

In addition to urging the joint development of curricula, the academic model relies heavily on faculty consultation and decision making as the catalyst for further attention to factors that help maximize transfer opportunities. Faculty collaboration is the key means whereby two- and four-year schools can rethink their respective roles in serving the transfer student. Through this collaboration, articulation discussions that traditionally focus on syllabi and credits evolve into substantive discussions about faculty expectations for students and about the academic tasks faculty expect students to perform. Articulation agreements can, in fact, be replaced by educational partnerships that provide students with curricular paths built on identified intellectual and skills competencies rather than on tentative lists of course equivalencies. Most importantly, faculty collaboration can lead to mutual trust between institutions and to a greater willingness on the part of institutions to work jointly in ways that eliminate unnecessary barriers to transfer.[6]

❖ *Benchmarks of Transfer Effectiveness*

The academic model requires a commitment to results and rejects the supposition that institutional effectiveness in transfer is adequately measured by investment in articulation agreements, counseling programs, and other traditional transfer improvement efforts. The impact of programs, services, curriculum development, and faculty collaboration must also be assessed. Establishing indicators of transfer effectiveness will require colleges to document transfer activity, determine community and student need for transfer services, and develop institutional goals that can be routinely monitored and evaluated. Without taking these steps, two- and four-year colleges will be unable to either confirm transfer success or detect weaknesses that need attention.

Two-year colleges should take several steps to confirm their effectiveness as transfer institutions. The first is to determine the extent of demand for transfer education within the college's student population and service area. With this information, colleges should then set institutional

goals for transfer, perhaps by specifying a realistic transfer rate. Finally, colleges should monitor their transfer performance by identifying potential transfer students, tracking their academic progress over time to determine the extent of transfer activity, and comparing the scope of that activity with institutional transfer goals. Special attention should be paid to documenting the transfer of minorities and others who remain underrepresented among baccalaureate degree recipients.

Four-year colleges also have research responsibilities. They should develop reporting mechanisms that provide neighboring community colleges with information on former students who matriculate into baccalaureate programs. In addition, four-year colleges should forecast the number of transfer students they are likely to receive and work with community colleges in setting goals for the baccalaureate attainment rate of these students. For example, one indicator that four-year colleges might consider as a measure of their contribution to transfer education is the proportion of bachelor's degree graduates who transferred a specified minimum number of credits from a community college. By working with neighboring community colleges to develop goals for the enrollment and graduation of transfer students, four-year colleges become active and accountable players in their education, rather than passive receivers of students who happen to meet transfer requirements that are listed in the college catalog.

The rigorous assessment called for by the academic model thus requires a commitment to collaborative research and planning on the part of two- and four-year colleges; student tracking systems that monitor student progress from entrance at the community college through completion of the baccalaureate are essential. The assessment component of the model also requires an institutional willingness to be held accountable for effects on student educational progress. While state or national transfer goals can be helpful, they do not address the institution's responsibility to meet the needs of its student clientele. Finally, the academic model assumes that assessment must be undertaken in a local context. Community colleges are a diverse group of institutions; given the educational goals of their students and the mix of educational institutions in their service districts, some will be more transfer-oriented than others. Benchmarks for transfer effectiveness are meaningful only when they are referenced to the unique environment of the individual community college and the four-year colleges with which it works.

❖ *Examining the Institutional Culture*

Faculty and administrator values and attitudes play a key role in successful implementation of the academic model. Both help to define the institutional culture and hence to determine the degree to which transfer is valued as an educational outcome. The institutional view of transfer, in turn, affects student perceptions of transfer as an educational option.

Faculty and administrator commitment to transfer is a major element of the institutional culture. At the community college, this commitment competes with commitment to other institutional functions and has an impact on the resources invested in the transfer function, on the effective management of transfer efforts, and on the development of benchmarks for transfer effectiveness. It also communicates to students a sense of the extent to which transfer is valued as an important and desirable educational goal and thus affects the decisions students make about

furthering their education. At the four-year college, faculty and administrator commitment to transfer may determine whether the institution will work cooperatively with community colleges to build educational paths for transfer students. In addition, the attitudes of educators at four-year colleges toward transfer students and their educational backgrounds may also affect the sense of self-worth that transfer students bring with them. Indeed, the academic and social integration of students into a four-year college environment is in part determined by the respect and regard they are given by four-year college faculty and administrators.

Faculty and administrator attitudes toward the institutions from which students are received or the institutions to which students transfer also influence the success of the academic model. Community college faculty and administrators who distrust the four-year college enterprise, or who feel that they do not share the educational goals and philosophies of colleagues at four-year colleges, may inadvertently influence student thinking about transfer as a meaningful educational goal. Similarly, the skepticism of four-year college faculty toward the academic effectiveness of the two-year college enterprise may manifest itself in negative attitudes toward transfer students who, in contrast to native students, may be viewed as second-class citizens. Mistrust between two-year and four-year college educators erodes commitment to transfer and adds to the difficulties experienced by transfer students.

BUILDING AN EMPIRICAL BASE TO ASSESS TRANSFER IMPROVEMENT PROJECTS

How do college educators know if the efforts they undertake to maximize transfer opportunities actually increase transfer rates? While many reports outline the activities initiated by colleges to facilitate transfer (e.g., Wechsler, 1989; Donovan and others, 1987), few analyze the effect of these interventions on the number of students who succeed in making the transition from the two-year college to the four-year institution. Despite the urgency with which these activities have been undertaken, especially in light of the importance of transfer to minority students, little is known about the impact of these activities on student progress. The academic model assumes a commitment to the documentation of results; its successful implementation will require colleges to more adequately assess their impact on student transfer activity.

Several factors have stymied assessments of transfer improvement projects. Part of the problem stems from the difficulty of tracing a causal relationship between college efforts to improve student transfer and transfer itself. For example, the Ford Foundation's evaluation of the campus-based projects undertaken in its Urban Community Colleges Transfer Opportunities Program (UCCTOP) was thwarted in part by the difficulty of disaggregating specific interventions (counseling programs, articulation agreements, etc.) from the host of other variables that can potentially affect transfer. Time was another complicating factor; because the time between initial enrollment and transfer is often lengthy, the full effect of the transfer improvement activities undertaken by UCCTOP colleges could not be captured in the relatively short time frame within which the evaluators had to work (Center for the Study of Community Colleges, 1988).

But the major stumbling block is the lack of reliable trend data on transfer activity itself. Though some states and colleges report data on the raw number of community college students transferring annually to four-year institutions (see, for example, California State Postsecondary Education Commission, 1988; State University of New York, 1990), few data summaries report these numbers in the form of a transfer rate that indicates the proportion of a defined student cohort that transfers from community colleges to four-year institutions. Without consistently defined transfer rate data, educators can only speculate about whether transfer is increasing or decreasing over time. Thus, they have little basis for estimating the impact of efforts to maximize transfer opportunities.

In response to the absence of transfer data that are based on consistent definitions, two national projects have been initiated to involve community colleges in the calculation of transfer rates. One effort stems from the Transfer Assembly project, conducted by the Center for the Study of Community Colleges in Los Angeles and funded by The Ford Foundation. The second effort stems from the work of the National Effective Transfer Consortium (NETC), a cooperative group of 28 community colleges that have contracted with Berman, Weiler and Associates of Berkeley, California to calculate transfer rates for each participating college. Both projects seek to generate baseline data that will help measure transfer activity in a consistent manner over time.

Transfer Assembly Project

A primary assumption of the Transfer Assembly project is that any transfer rate definition must be easily understood and credible on its own merits. It must be based on data that are readily available without special surveys or other out-of-the-ordinary data collection. Finally, the definition must yield a number that serves as an indicator of transfer without being so high that it appears to be politically self-serving. Hence, the transfer rate definition used by the Transfer Assembly project is based on a cohort of *entering* students who enroll at the community college with no prior college experience and who earn at least 12 college-level units within four years. Transfer rates are calculated as the proportion of students within this cohort who enroll at a baccalaureate-granting institution at some point within four years of initial enrollment at the community college (Cohen, 1991).

During 1990-91, the Transfer Assembly project involved 114 two-year institutions that worked with surrounding four-year colleges to calculate their own transfer rates. Each participating college:

1. identified those students who entered the community college with no previous college experience in the fall of 1985;

2. determined which of those students had earned at least 12 credits by the spring of 1989 (these students served as the denominator of the transfer rate equation); and

3. provided neighboring four-year colleges (either directly or through a state agency) with a list of these students (or with a data tape with student identification numbers) and asked if they had been admitted at any time through the fall of 1989. (Those that have been admitted served as the numerator of the equation.)

Final tabulations reveal that just over 50 percent of the students entering with no prior college experience in the fall of 1985 had completed 12 or more units within the ensuing four years. Of that group, 23 percent had taken classes at a university (Cohen, 1991).

❖ *National Effective Transfer Consortium*

The National Effective Transfer Consortium (NETC) also insists on simplicity and bases its transfer rate on a cohort of *leaving* students, those who are enrolled in the spring term but who do not reenroll in the subsequent fall term; excluded from the cohort are those students who are "reverse transfers" from four-year colleges, as well as those students who earn fewer than six units at the community college (Berman and others, 1990). Transfer rates are calculated as the proportion of students within this cohort who enroll at a four-year college within a specified time frame after leaving the community college. A preliminary study, based on a follow-up survey of students at the 28 NETC colleges who were enrolled in the spring of 1988 but who did not reenroll in the fall of 1988, revealed that 25 percent of the leavers enrolled at a four-year college

immediately after leaving (that is, in the fall of 1988). The follow-up survey also gathered information on the original educational goals of the students and on their activities after leaving the colleges; findings indicate that many of the students used the community colleges for purposes other than preparation for transfer (Berman and others, 1990).

❖ *Adopting a Standard Transfer Rate Definition*

Whether or not one or both of these transfer rate indicators will be adopted by community colleges is open to speculation. Beyond the political issue of how to convince 1,200 institutions to adopt a standard transfer measure (a questionable proposition unless mandated by the federal government as a requisite to receiving federal monies), two other factors must be addressed: the inherent limitations of the proposed transfer rate indicators as measures of transfer activity and the fear that transfer rate data will be misused.

The limitations of the transfer rates proposed by the Transfer Assembly and the NETC stem from compromises that are inherent in their design. One compromise deals with the minimum number of units that students must earn at the community college to be considered part of the pool of potential transfers. Ideally, that pool would include only those students who earned an associate degree; these are truly the students for whose subsequent academic performance the community college can be held accountable (Cohen and Brawer, 1987). But as the available research demonstrates, many (probably most) students who transfer do so without the credential. A second compromise lies in the fact that both methodologies understate the magnitude of transfer. The definition used by the Transfer Assembly project includes only those students who transfer to a nearby four-year college within four years of enrolling at a community college; students who transfer out-of-state or who take a longer period of time to transfer are excluded. By the same token, the definition used by the National Effective Transfer Consortium in its initial study of 1988 "leavers" excludes those who do not transfer immediately to a four-year college (that is, in the term immediately following their departure from the community college). Thus, both definitions trade off richness of detail for simplicity and expediency. *(Table Six details the salient elements of each of the transfer rate definitions.)*

Another problem lies in the potential for the misuse of rate indicators. Though they are value-free and say nothing about a college's effectiveness in providing transfer education, the possibility that rates will be used inappropriately to rank colleges cannot be discounted.[7] This apprehension is heightened by the simplicity of the definitions used in their calculation and by the fact that those definitions result in understated transfer rates. Knoell (1990), for example, notes the reluctance to adopt transfer rate indicators that do not factor in variables such as student academic ability. In California, she observes, "no transfer rates are computed because of the unsatisfactory nature of any devisor that could be devised from information that is currently available" (p. 50).

Yet the disadvantages and dangers of the Transfer Assembly and NETC models may be outweighed by other factors. One is the fact that they can be easily replicated. Both have the advantage of simplicity because they avoid abstract constructs and are unambiguous. For example, neither defines the transfer cohort as those community college students who enroll with

Table Five
Comparison of Transfer Rate Definitions From The Transfer Assembly and the National Effective Transfer Consortium

	Assembly Definition	NETC Definition Initial Study
Cohort	Students who enter the community college at a single point in time with no previous college experience and who earn at least 12 college-level credits within four years of entrance	Students who leave the community college at a single point in time with at at least six credits (excludes "reverse transfers" and those who already hold bachelor's degrees)
Time frame	Transfer within four years of first enrollment at the community college	Transfer immediately after leaving community college
Community college credit required	Twelve units	Six units
Data collection method	Community colleges collect data directly from four-year colleges	Follow-up survey of "leavers"

Note: The NETC defines "leavers" as those students who are enrolled for credit in one term but who do not reenroll in the subsequent term. Furthermore, the definition excludes students who are concurrently enrolled at a four-year college or who already hold a bachelor's or higher degree (Berman and others, 1990). The time frame for the NETC definition may vary. Subsequent, unpublished studies undertaken by the NETC calculate transfer rates on the basis of those leavers who transfer at any point within one year of leaving the community college.

the intention of transferring; thus, they avoid the problem of assessing student educational intent. Another benefit of a standard transfer rate is its potential usefulness in research. Individual colleges can use transfer rate data to measure the rise and fall of transfer over time and thus to make informed judgments about the impact of investments in transfer improvement projects. On a larger scale, researchers can use variances in transfer rates among colleges to test hypotheses about what works in improving transfer. Some of these variables might include:

- **Strength of the liberal arts curriculum.** Those community colleges with a full range of liberal arts offerings may be expected to record higher transfer rates than colleges with weaker transfer offerings.

- **Transfer arrangements with four-year colleges.** Those colleges in states with a strong role in articulation and other formal transfer arrangements may be expected to have higher transfer rates than those colleges in states with few mandates for interinstitutional transfer arrangements.

- **Matriculation and guidance.** Those colleges that assess student skills at entrance, require remediation where necessary, enforce course prerequisites, and monitor student progress may be expected to have higher transfer rates than those colleges that leave students to their own devices.

Such analyses need not be complicated. Their purpose is not to determine the correlations of the numerous social, economic, or other variables that may potentially affect an institution's transfer rate. Nor are these analyses judgmental; no rank-orderings of colleges need be published. The purpose of these analyses, rather, is to test assumptions about what works in promoting transfer. The availability of transfer rate indicators collected by individual colleges according to a consistent definition will enable us to study variations among colleges in ways that replace speculation with evidence.

CONCLUSION: IMPLICATIONS OF A REEMPHASIS ON TRANSFER

Various forces within and without the two- and four-year sectors of higher education have converged to reemphasize transfer and the responsibilities college educators have to strengthen the community college transfer function. This paper has examined these factors, the prevailing approaches to facilitating student transfer from two- to four-year colleges, and the findings of national research on the magnitude and determinants of transfer. It has examined the relationship between transfer and the collegiate academic culture and has stressed the need for institutions to document the transfer success of their students. Proposed methods of calculating transfer rates, indicators that may help colleges in the documentation process, have also been examined.

The need for critical self-appraisal has been stressed throughout, especially in relation to the ways a reemphasis on transfer challenges long-held assumptions about the academic culture. The unsettling nature of these challenges are apparent in the reservations of scholars who, though supportive of the transfer function, argue that additional emphasis on transfer and on the establishment of benchmarks of transfer effectiveness may have unintended, detrimental consequences. Among these consequences are abandonment of institutional responsiveness, a loss of institutional identity, and an emphasis on assessment of transfer effectiveness at the cost of investment in articulation and other transfer improvement strategies. Any discussion of transfer should consider these concerns and their implications.

❖*Reservations About the Renewed Emphasis on Transfer*

One concern lies in the fear that emphasis on transfer will weaken the comprehensive mission, imposing an elitism on the community college by stressing academics at the expense of other functions. Cross (1990), for example, maintains that the renewed focus on baccalaureate education might be made at the price of the community college's historic commitment to the educationally neglected. She questions whether the needs of all those who attend the community college can be met "if public policy narrows the definition of success to the attainment of bachelor's degrees" (p. 2). Grubb (1990b) expresses a similar concern, fearing for the community college's comprehensive identity. Partially in response to criticism that community colleges have become vocationalized (see, for example, Brint and Karabel, 1990), he urges community college educators not to replace one preoccupation with another. If community colleges have placed too much emphasis on occupational education, Grubb argues, they will not improve matters with a swing of the pendulum back to an overemphasis on transfer.

Transfer as a threat to institutional responsiveness also emerges in the writings of those who express reservations about the movement to improve transfer. Some argue that emphasis on transfer imposes educational priorities that are not always warranted by local community needs. Alfred and Peterson (1990), for example, maintain that community colleges are successful when

they act on community needs and that responsiveness to those needs is more important than institutional assertiveness in defining and prescribing pre-baccalaureate curricular sequences. They see community colleges as essentially passive, consumer-oriented institutions that connect to the community through an understanding of and response to local educational demands. In this context, an emphasis on transfer is warranted only if there is a clear indication that it is a community desire, and they find little evidence of this desire.

A fourth area of concern pertains to research in institutional effectiveness. Some do not stress the empirical assessment of transfer outcomes—a key element of the academic model—in calls for the improvement of transfer. Knoell (1990) and Bender (1990), for example, both emphasize the importance of articulation agreements, state policies and guidelines, and student support and counseling services as more effective means of improving transfer. They emphasize resource investment to transfer rather than the establishment of benchmarks of institutional effectiveness in transfer; thus, they continue to view transfer within the framework of administrative processes and give less emphasis to transfer as an educational outcome that is affected by instruction, curricula, and the academic culture of the institution.

A final category of concerns is evident in the critiques of Pincus and Archer (1989), Lee and Frank (1990), and others who question the effectiveness of community colleges as transfer institutions in the first place. They raise the question of whether or not transfer improvement efforts will work without substantive, systemic change of the institution itself. Relying on High School and Beyond data and some state studies, Pincus and Archer maintain that the community college transfer function "is in crisis" (p. 1) and does an especially poor job for some racial minorities. Lee and Frank, also analyzing High School and Beyond data, provide corroborating evidence that shows that community college students who do transfer are better prepared and financially better off than those who do not transfer. The picture of the successful transfer student that emerges in the Lee and Frank study is similar to the picture of the student who enrolls at a four-year college in the first place. They therefore question the role the community college plays in fostering the educational success of transfer students and argue that those who transfer would have been educationally successful in other educational settings and that the community college did not make a unique contribution to their educational achievement. Like Pincus and Archer, they infer that community colleges are not efficient vehicles for the undergraduate education of minorities and others who remain underrepresented among those who receive baccalaureate and higher degrees.

❖ *Improving Transfer: Not a Zero-Sum Game*

The reservations expressed by these and others are reminders that transfer improvement efforts should not be undertaken in the context of a zero-sum game, with emphasis on transfer built at the expense of other educational functions or with a commitment to assessment that overshadows institutional investment in articulation, student services, and other modes of transfer assistance. Indeed, while forcing a reevaluation of institutional values and priorities, a reemphasis on transfer does not demand the abandonment of the comprehensive curriculum in favor of the single-track junior college. Nor does it require community college educators to relinquish their responsiveness and commitment to access in favor of a totally prescriptive

program for the academically select. It *does* require educators to determine the educational outcomes (including transfer) to which the community college leads students, to consider the role curricula and faculty play in helping students achieve those outcomes, and to set measurable objectives based on these outcomes as a means of assessing institutional effectiveness. The requisites of the academic model, for example, strengthen the entire institution by clarifying its purpose and providing a foundation for curriculum design, pedagogy, and faculty development. This sense of purpose and self-assessment will go far in answering the troubling criticisms of those who suggest that community colleges are inherently ineffective transfer institutions.

ENDNOTES

[1] The *High School and Beyond* study also included a sample of students who were high school sophomores during 1979-80. To date, however, most researchers using HSB data to analyze transfer from community colleges to four-year institutions have used data from the cohort of high school seniors only.

[2] The relatively large size of the decline of baccalaureate attainment rates for transfer students who had earned academic associate degrees (from 61 to 12 percent) begs further analysis. Perhaps the size of the decline is an artifact of the relatively small number of students involved. Only 7.5 percent of the community college students in the 1972 cohort and 5.7 percent of the students in the 1980 cohort earned an academic associate degree within four years of graduation. Of these, 69 percent and 49 percent (respectively) transferred to a four-year college within four years. Because a relatively small number of students are involved, minor changes in the absolute number of students earning the baccalaureate may result in relatively large changes in the percentage of students earning the degree.

[3] Valez and Javalgi (1987) also determined that the student's religion was a strong predictor of transfer, with Jewish students significantly more likely to transfer than non-Jewish students.

[4] Several studies, reviewed by Dougherty (1987), compare the institutional efficacy of two-year versus four-year colleges by contrasting the persistence and baccalaureate attainment of students who start their postsecondary careers at community colleges with the persistence and baccalaureate attainment of students who start out at four-year institutions. The findings provide strong evidence that, on average, those aspiring to the baccalaureate are more likely to reach their goal by enrolling at a four-year college from the start. This makes sense; opting for a four-year college obviates the need to negotiate the transfer process. But as Cohen, Brawer, and Bensimon (1985) point out, comparisons of the relative merits of two-year and four-year colleges are of little value to the many community college students for whom the university freshman class is not an option. Research contrasting student transfer success across community colleges will be more helpful to these students, perhaps discovering more effective ways of leading community college students to the baccalaureate.

[5] Some states are developing computerized systems detailing the transfer and admissions requirements of four-year colleges and including protocols that allow students to work individually on the development of programs that will lead to successful transfer. For example, Bender (1990) points out that "Florida's on-line advisement and articulation system (SOLAR) provides students with an academic plan depending on their intended major and on the requirements of the senior college they plan to attend" (pp. 11-12). California's ASSIST program (Articulation System Stimulating Interinstitutional Student Transfer) is similar. "It provides information on transfer admisssion requirements, course recognition and comparability, as well as information on support services available at each institution" (Bender, 1990, p. 12).

[6] For an example of how collaboration between two-year and four-year college faculty builds the capacity for interinstitutional work on transfer, see Bowles' (1986) description of faculty collaboration within the City University of New York. See also Grossbach's (1991) essay detailing his efforts as a faculty member at the Community College of Philadelphia to facilitate a dialogue between faculty at his institution and faculty at neighboring universities.

[7] As Berman and others (1990) point out, variations in transfer rates between community colleges are to be expected. For example, technical colleges focusing on job training may be expected to have lower transfer rates than comprehensive community colleges that place relatively equal emphasis on transfer and vocational education. The effectiveness of an institution as a provider of transfer education can only be judged with reference to the environment in which it operates and not in relationship to the transfer rates of other institutions.

REFERENCES

Adelman, C. "Transfer Rates and the Going Mythologies: A Look at Community College Patterns." Change, 1988, 20 (1), 38-41.

Alba, R.D., and Lavin, D.E. "Community Colleges and Tracking in Higher Education." Sociology of Education, 1981, 54 (4), 223-237.

Alfred, R.L., and Peterson, R.O. "Keeping Transfer in Perspective." Community, Technical, and Junior College Journal, 1990, 60 (6), 27-30.

Bender, L. "State Articulation Policies: Myths and Realities." In L. Bender (Ed.), Spotlight on the Transfer Function: A National Study of State Policies and Practices. Washington, D.C.: American Association of Community and Junior Colleges, 1990.

Berman, P., and others. Enhancing Transfer Effectiveness: A Model for the 1990s. Washington, D.C.: American Association of Community and Junior Colleges, 1990.

Bowles, D. "Transferability in the Liberal Arts and Sciences." In C. Prager (Ed.), Enhancing Articulation and Transfer. New Directions for Community Colleges, No. 61. San Francisco: Jossey-Bass, 1988.

Brint, S., and Karabel, J. The Diverted Dream: Community Colleges and the Promise of Educational Opportunity in America, 1900-1985. New York: Oxford University Press, 1989.

California State Postsecondary Education Commission. Update of Community College Transfer Student Statistics, Fall 1987. University of California, The California State University, and California's Independent Colleges and Universities. Commission Report 88-15. Sacramento: California Postsecondary Education Commission, 1988. (ED 295 710)

Center for the Study of Community Colleges. An Assessment of [the] Urban Community College Transfer Opportunities Program. The Ford Foundation's Second Stage Transfer Opportunity Awards. Final Report. Los Angeles: Center for the Study of Community Colleges, 1988. (ED 293 573)

Cohen, A.M. "Counting the Transfers: Pick a Number." Community, Technical, and Junior College Times, April 24, 1990.

Cohen, A.M., and Brawer, F.B. The Collegiate Function of Community Colleges. San Francisco: Jossey-Bass, 1987.

Cohen, A.M., Brawer, F.B., and Bensimon, E. Transfer Education in American Community Colleges. Los Angeles: Center for the Study of Community Colleges, 1985. (ED 255 250).

Cohen, A.M. "The Transfer Indicator." Paper presented at the Annual Convention of the American Association of Community and Junior Colleges, Kansas City, MO, April 16, 1991.

Cross, K.P. "The Underside of the Push for Degrees." Policy Perspectives, 1990, 2 (3), 1-2.

Donovan, R.A., and others. Transfer: Making It Work. A Community College Report. Washington, D.C.: American Association of Community and Junior Colleges, 1987.

Dougherty, K. "The Effects of Community Colleges: Aid or Hindrance to Socioeconomic Attainment?" Sociology of Education, 1987, 60 (2), 86-103.

Eaton, J. "An Academic Model for Transfer Education." Transfer Working Papers, 1990, 1 (3).

Farland, R., and Anderson, C. The Transfer Center Project. Sacramento: California Community Colleges, Office of the Chancellor, 1989. (ED 309 801)

Florida State Board of Community Colleges. Articulation, Fall 1988. Tallahassee: Florida State Board of Community Colleges, 1988. (ED 314 148)

Grossbach, B.L. "Generating Faculty Dialog Across Colleges." Transfer Working Papers, 1991, 2 (1).

Grubb, W.N. "The Decline of Community College Transfer Rates: Evidence from National Longitudinal Surveys." Berkeley: Institute for the Study of Family, Work, and Community, 1990a.

Grubb, W.N. "The Decline of Community College Transfer Rates: Evidence from National Longitudinal Surveys." Journal of Higher Education, 1991, 62 (2), 194-217.

Grubb, W.N. "Finding an Equilibrium: Enhancing Transfer Rates and Maintaining the Comprehensive Community College." Revised version of a paper presented at the Conference on Leadership Development of the League for Innovation in the Community College, July 8-11, 1990b. (ED 324 073)

Illinois Community College Board. Illinois Community College Board Study: A Five-Year Study of Students Transferring from Illinois Two-Year Colleges to Illinois Senior Colleges/Universities in the Fall of 1979. Springfield: Illinois Community College Board, 1986. (ED 270 148)

Illinois Community College Board. A Study of Fall 1980 Illinois Community College Freshmen Earning Baccalaureate Degrees From Illinois Public Universities (1980-1988). Springfield: Illinois Community College Board, 1990.

Kintzer, F.C., and Wattenbarger, J.L. The Articulation/Transfer Phenomenon: Patterns and Directions. Washington, D.C.: American Association of Community and Junior Colleges, 1985.

Knoell, D. Transfer, Articulation and Collaboration: Twenty-Five Years Later. Washington, D.C.: American Association of Community and Junior Colleges, 1990.

Lee, V.E., and Frank, K.A. "Student Characteristics that Facilitate Transfer from Two-Year to Four-Year Colleges." Sociology of Education, 1990, 63 (2), 194-217.

Nora, A., and Rendon, L.I. "Determinants of Predisposition to Transfer Among Community College Students: A Structural Model." Research in Higher Education, 1990, 31 (3), 235-254.

Palmer, J. Accountability Through Student Tracking: A Review of the Literature. Washington, D.C.: American Association of Community and Junior Colleges, 1989.

Pincus, F.L., and Archer, E. Bridges to Opportunity: Are Community Colleges Meeting the Transfer Needs of Minority Students? New York: Academy for Educational Development and College Entrance Examination Board, 1989. (ED 312 026)

Richardson, R.C., Jr., and Doucette, D.S. Persistence, Performance and Degree Achievement of Arizona's Community College Transfers in Arizona's Public Universities. Tempe: Arizona State University, Department of Higher and Adult Education, 1980. (ED 197 785)

Schantz, N.B., and Brown, P.Q. Trends in Racial/Ethnic Enrollment in Higher Education: Fall 1978 Through Fall 1988. NCES 90-370. Washington, D.C.: U.S. Department of Education, Office of Educational Research and Improvement, 1990.

State University of New York. Application and Enrollment Patterns of Transfer Students, Fall 1989. Office of Institutional Research Report No. 6-89. Albany: State University of New York, 1990. (ED 320 635)

Valez, W., and Javalgi, R.G. "Two-Year to Four-Year College: The Likelihood of Transfer." American Journal of Education, 1987, 96 (1), 81-94.

Wechsler, H. The Transfer Challenge: Removing Barriers, Maintaining Commitment. Washington, D.C.: American Association of Colleges, 1989. (ED 317 337)

Washington State Board For Community College Education. A Study of the Role of Community Colleges in the Achievement of the Bachelor's Degree in Washington State: Results of the Spring 1988 Bachelor's Degree Survey. Operations Report No. 89-1. Olympia: Washington State Board For Community College Education, 1989. (ED 303 199)

APPENDIX 1

CURRENT THINKING ABOUT TRANSFER POLICY

Since the late 1980s, interest in the community college transfer function has increased considerably. While some educators value this additional investment in transfer, other educators suggest caution about renewed emphasis on transfer. Yet others question whether additional commitment to transfer can be of benefit to community college students. These works reflect various points of view about transfer.

Astin, A. W. "Strengthening Transfer Programs." In G. Vaughan and Associates (eds.), Issues for Community College Leaders in a New Era. San Francisco: Jossey-Bass, 1983.

Bernstein, A. "The Devaluation of Transfer: Current Explanations and Possible Causes." In S. Zwerling (ed.), The Community College and Its Critics. New Directions for Community Colleges, no. 54. San Francisco: Jossey-Bass, 1986.

Cohen, A. M. "Degree Achievement by Minorities in Community Colleges." The Review of Higher Education, 1988, 11 (4), 383-402.

Cohen, A. M., and others. Transfer Education in American Community Colleges. Los Angeles: Center for the Study of Community Colleges, 1985.

Cross, P. K. "The Underside of the Push for Degrees." Policy Perspectives, 1990, 2 (3), 1-2.

Dougherty, K. "The Effects of Community Colleges: Aid or Hindrance to Socioeconomic Attainment?" Sociology of Education, 1987, 60 (2), 86-103.

Eaton, J. S. "Minorities, Transfer, and Higher Education." Peabody Journal of Education, 1988, 66 (1), 58-69.

Eaton, J. S. "Three Myths of Transfer Education." Community, Technical, and Junior College Journal, 1990, 60 (6), 18-20.

Grubb, W. N. "The Effects of Differentiation on Educational Attainment: The Case of Community Colleges." The Review of Higher Education, 1989, 12 (4), 349-374.

Grubb, W. N. Stopping the Pendulum: Enhancing Transfer Rates and Maintaining the Comprehensive Community College. Draft copy. Berkeley: University of California, School of Education, 1990.

Lombardi, J. The Decline of the Transfer Function. Topical Paper No. 70. Los Angeles: ERIC Clearinghouse for Junior Colleges, University of California, 1979.

Nora, A., and Rendon, L. I. "Determinants of Predisposition to Transfer Among Community College Students: A Structural Model." Research in Higher Education, 1990, 31 (3), 235-254.

Palmer, J. "Is Vocationalism to Blame?" Community, Technical, and Junior College Journal, 1990, 60 (6), 21-23, 25.

Pincus, F. L., and Archer, E. Bridges to Opportunity: Are Community Colleges Meeting the Transfer Needs of Minority Students? New York: Academy for Educational Development and College Entrance Examination Board, 1989. (ED 312 026)

Richardson, R. C., and Bender, L. W. Students in Urban Settings: Achieving the Baccalaureate Degree. ASHE-ERIC Higher Education Research Report No. 6. Washington, D.C.: Association for the Study of Higher Education, 1985.

EMPIRICAL STUDIES OF STUDENT FLOW

There are considerable differences of opinion among educators about indicators of transfer effectiveness. Some of these works describe various approaches to establishing transfer rate indicators and the usefulness of these indicators. Some focus on other studies of student flow.

Adelman, C. "Transfer Rates and the Going Mythologies: A Look at Community College Patterns." Change, 1988, 20 (1), 38-41.

Adelman, C. "Using Transcripts to Validate Institutional Mission: The Role of the Community College in the Postsecondary Experience of a Generation." Paper presented at the annual meeting of the Association for the Study of Higher Education, Atlanta, GA, November 2-5, 1989.

Alba, R. D., and Lavin, D. E. "Community Colleges and Tracking in Higher Education." Sociology of Higher Education, 1981, 54 (4), 223-237.

Banks, D. L. Why a Consistent Definition? Transfer Assembly Background Paper. Los Angeles: Center for the Study of Community Colleges, 1990.

Berman, P., Curry, J., Nelson, B., and Weiler, D. Enhancing Transfer Effectiveness: A Model for the 1990s. Washington, D.C.: American Association of Community and Junior Colleges, 1990.

Cohen, A. M. "The Transfer Indicator." Transfer Working Papers. 1991, 2 (2).

"Good Practices in Transfer Education." Transfer Working Papers, 1990, 1 (3).

Grubb, W. N. "The Decline of Community College Transfer Rates: Evidence from National Longitudinal Surveys." Journal of Higher Education, 1991, 62 (2), 194-217.

Lee, V. E., and Frank, K. A. "Student Characteristics that Facilitate Transfer from Two-year to Four-year Colleges." Sociology of Education, 1990, 63, 178-193.

McIntyre, C. "Assessing Community College Transfer Performance." Research in Higher Education, 1987, 27 (2), 142-162.

National Council of State Directors of Community/Junior Colleges. Survey of State Directors on Student Transfer Reporting and Analysis. [Austin, TX]: National Council of State Directors of Community/Junior Colleges, 1990.

Velez, W., and Javalgi, R. G. "Two-year to Four-year College: The Likelihood of Transfer." American Journal of Education, 1987, 96 (1), 81-94.

INSTITUTIONAL PRACTICES TO STRENGTHEN TRANSFER

Some community colleges and four-year schools have developed academic initiatives to strengthen transfer. These works provide information about specific programs and conceptual approaches to transfer.

Center for the Study of Community Colleges. An Assessment of Urban Community Colleges Transfer Opportunities Program. The Ford Foundation's Second Stage Transfer Opportunity Awards. Final Report. Los Angeles: Center for the Study of Community Colleges, 1988. (ED 293 573)

Donovan, R. A., and others (eds.). Transfer: Making it Work. A Community College Report. Washington, D.C.: American Association of Community and Junior Colleges, 1987.

Eaton, J. S. "An Academic Model of Transfer Education." Transfer Working Papers, 1990a, 1 (1).

Eaton, J. S. "Strengthening the Transfer Function: From 'Zero-Sum' Game to a 'Win-Win' Situation." Leadership Abstracts, 1990b, 3 (14).

Grossbach, B. L. "Generating Faculty Dialogue Across Colleges." Transfer Working Papers, 1991, 2 (1).

Palmer, J. "Bolstering the Community College Transfer Function: An ERIC Review." Community College Review, 1986-87, 14 (3), 53-63.

Richardson, R. C., Jr. "Improving Transfer for Urban Community College Students." Leadership Abstracts, 1988, 1 (9).

"The Partnership Grant Program." Transfer Working Papers, 1990, 1 (2).

"The Partnership Grant Program: Projects Funded August 1990." Transfer Working Papers, 1990, 1 (4).

Wechsler, H. The Transfer Challenge: Removing Barriers, Maintaining Commitment. Washington, D.C.: Association of American Colleges, 1989. (ED 317 337)

Williams, D. N. (ed.). The 1990 Transfer Assembly. Los Angeles: ERIC Clearinghouse for Junior Colleges and Center for the Study of Community Colleges, 1990.

ARTICULATION

There are many articulation agreements between two-year colleges and receiving institutions throughout the country. These works provide an overview of some of these key documents.

Bender, L. W. (ed.). Spotlight on the Transfer Function: A National Study of State Policies and Practices. Washington, D.C.: American Association of Community and Junior Colleges, 1990.

Kintzer, F. C. (ed.). Improving Articulation and Transfer Relationships. New Directions for Community Colleges, no. 39. San Francisco: Jossey-Bass, 1982.

Kintzer, F. C., and Watenbarger, J. L. The Articulation/Transfer Phenomenon: Patterns and Directions. Washington, D.C.: American Association of Community and Junior Colleges, 1985.

Kintzer, F. C. Articulation and Transfer: A Review of Current Literature on Statewide and Interinstitutional Program Models and Trends. Trenton: New Jersey State Department of Higher Education, 1989. (ED 311 946)

Knoell, D. Transfer, Articulation, and Collaboration: Twenty-five Years Later. Washington, D.C.: American Association of Community and Junior Colleges, 1990.

Palmer, J. "Issues in Program Articulation." In D. W. Stewart and others (eds.), Problems Faced by Military Personnel in Pursuing Higher Education Programs: A Study with Recommendations. MDA 903-88-C-0027. Pensacola, FL: Defense Activities for Nontraditional Education Services, 1989.

Prager, C. (ed.). Enhancing Articulation and Transfer. New Directions for Community Colleges, no. 61. San Francisco: Jossey-Bass, 1988.

STATE TRANSFER REPORTS

Several states have on-going data collection efforts regarding transfer and student flow and offer insightful annual reports. In addition, many states periodically publish summary reports regarding specific issues and problems related to transfer. Some examples are listed below. Those marked with an asterisk (*) are data reports that are published on a periodical basis.

CALIFORNIA

* Baratta, F., and Apodaca, E. C. A Profile of California Community College Transfer Students at the University of California. Berkeley: Office of the President, University of California, 1988. (ED 295 693)

California Community Colleges. Transfer Education: California Community Colleges. Sacramento: Office of the Chancellor, California Community Colleges, 1984. (ED 250 025)

California Community Colleges. Community College Transfer Performance. Sacramento: Office of the Chancellor, California Community Colleges, 1989. (ED 314 110)

California Postsecondary Education Commission. Views from the Field on Community College Transfer: Testimony to the Ad-hoc Committee on Community College Transfer of the California Postsecondary Education Commission. Commission Report 84-20. Sacramento: California Postsecondary Education Commission, 1984. (ED 244 669)

California Postsecondary Education Commission. Strengthening Transfer and Articulation Policies and Practices in California's Colleges and Universities: Progress Since 1985 and Suggestions for the Future. Commission Report 87-41. Sacramento: California Postsecondary Education Commission, 1987. (ED 293 602)

* California Postsecondary Education Commission. Update of Community College Transfer Student Statistics, 1988-89: University of California, the California State University, and California's Independent Colleges and Universities. Commission Report 89-23. Sacramento: California Postsecondary Education Commission, 1989. (ED 313 073)

Farland, R. W., and Anderson, C. Articulation with Four-year Colleges. Sacramento: Office of the Chancellor, California Community Colleges, 1988. (ED 290 509)

Farland, R. W., and Anderson, C. Transfer and Articulation with Four-year Colleges and Universities: A Report. Sacramento: Office of the Chancellor, California Community Colleges, 1989. (ED 303 224)

FLORIDA

* Florida State Board of Community Colleges. Articulation, Fall 1988. Tallahassee: Florida State Board of Community Colleges, 1988. (ED 314 148)

Task Force on Articulation. Articulation Study: The Role of Florida Community Colleges in Articulation.[Tallahassee]: Task Force on Articulation, Florida State Board of Community Colleges, 1988. (ED 300 042)

ILLINOIS

Illinois Community College Board. Illinois Community College Board Transfer Study: A Five-year Study of Students Transferring from Illinois Two-year Colleges to Illinois Senior Colleges/Universities in the Fall of 1979. Springfield: Illinois Community College Board, 1986. (ED 270 148)

Illinois Community College Board. Current Issues in Transfer Articulation Between Community Colleges and Four-year Colleges and Universities in Illinois. Springfield: Illinois Community College Board, 1989. (ED 304 168)

Illinois Community College Board. A Study of Fall 1980 Illinois Community College Freshmen Earning Baccalaureate Degrees from Illinois Public Universities (1980-1988). Springfield: Illinois Community College Board, 1990. (ED 322 963)

KANSAS

Doucette, D. S., and Teeter, D. J. "Student Mobility Among the Public Community Colleges and Universities in the State of Kansas." Paper presented at the annual forum of the Association for Institutional Research, Portland, OR, April 28-May 1, 1985. (ED 262 844)

MICHIGAN

Neal, M. L. Student Transfers from Community Colleges to Baccalaureate Institutions in Michigan. [Lansing]: State Board for Public Community and Junior Colleges, 1988.

NEW JERSEY

Bender, L. W. Transfer and Articulation Among the Public Institutions of Higher Education in New Jersey. A Report to the Chancellor. Tallahassee: State and Regional Higher Education Center, Florida State University, 1987. (ED 283 586)

WASHINGTON

Washington State Board for Community College Education. A Study of the Role of Community Colleges in the Achievement of the Bachelor's Degree in Washington State: Results of the Spring 1988 Bachelor's Degree Survey. Operations Report No. 89-1. Olympia: Washington State Board for Community College Education, 1989. (ED 303 199)

TEXAS

Texas Higher Education Coordinating Board. Analysis of Student Transfer and Persistence. Austin: Texas Higher Education Coordinating Board, [1988]. (ED 294 630)

GENERAL WORKS/BACKGROUND

These following works enable the reader to place transfer within the larger context of higher education issues of current importance such as the role and function of the community college, minority education, educational quality, financing of higher education, and general education.

Association of American Colleges. A New Vitality in General Education. Washington, D.C.: Association of American Colleges, 1988. (ED 290 387)

Astin, A. Minorities in American Higher Education. San Francisco: Jossey-Bass, 1988.

Astin, A. Assessment for Excellence. New York: Macmillan, 1991.

Breneman, D. W., and Nelson, S. C. Financing Community Colleges: An Economic Perspective. Washington, D.C.: The Brookings Institute, 1981.

Brint, S., and Karabel, J. The Diverted Dream: Community Colleges and the Promise of Educational Opportunity in America, 1900-1985. New York: Oxford University Press, 1989.

Cohen, A. M. "The Case for the Community College." American Journal of Education, 1990, 98 (4), 426-442.

Cohen, A. M., and Brawer, F. B. The Collegiate Function of Community Colleges. San Francisco: Jossey-Bass, 1987.

Cohen, A. M., and Brawer, F. B. The American Community College. (2nd ed.) San Francisco: Jossey- Bass, 1989.

Eaton, J. S. (ed.). Colleges of Choice: The Enabling Impact of the Community College. New York: Macmillan, 1988.

Eaton, J. S. The Unfinished Agenda: Higher Education and the 1980s. New York: Macmillan, 1991.

Gutmann, A. Democratic Education. Princeton: Princeton University Press, 1987.

Richardson, R. C., and Bender, L. W. Fostering Minority Access and Achievement in Higher Education. San Francisco: Jossey-Bass, 1987.

Richardson, R. C., Fisk, E. C., and Okun, M. A. Literacy in the Open-access College. San Francisco: Jossey-Bass, 1983.

Richardson, R. C., and others. Achieving Quality Through Diversity. New York: Macmillan, 1991.

Tinto, V. Leaving College: Rethinking the Causes and Cures of Student Attrition. Chicago: The University of Chicago Press, 1987.

Zwerling, S. L. (ed.). The Community College and Its Critics. New Directions for Community Colleges, no. 54. San Francisco: Jossey-Bass, 1986.

GRANTS REVIEW PANEL

George E. Ayers, *Vice President for Academic Programs*, American Association of State Colleges and Universities

Estela M. Bensimon, *Assistant Professor and Research Associate*, Center for the Study of Higher Education, Pennsylvania State University

Nancy R. Cirillo, *Assistant Dean*, College of Liberal Arts and Sciences, The University of Illinois at Chicago

Richard A. Donovan, *Director of Networks and Professor of English*, Bronx Community College

Charles R. Fuget, *Commissioner for Higher Education*, Pennsylvania Department of Education

Barry L. Grossbach, *Chair*, Department of History / Philosophy and Professor of History, Community College of Philadelphia

Janet E. Lieberman, *Special Assistant to the President for Educational Collaboratives*, LaGuardia Community College

Gaines Post, Jr., *Professor of History*, Claremont McKenna College

Neal A. Raisman, *Dean*, Raymond Walters College, University of Cincinnati

Richard C. Richardson, Jr., *Professor*, Educational Leadership & Policy Studies, Arizona State University

NATIONAL CENTER FOR ACADEMIC ACHIEVEMENT AND TRANSFER STAFF

Judith S. Eaton, *Vice President*, American Council on Education and *Director*, National Center for Academic Achievement and Transfer

Pamela S. Woods, *Executive Assistant*

AMERICAN COUNCIL ON EDUCATION

Board of Directors 1991

EXECUTIVE COMMITTEE

Robert L. Albright, President
Johnson C. Smith University, *Chair*

Hoke L. Smith, President
Towson State University, *Vice Chair*

Stanley O. Ikenberry, President
University of Illinois, *Immediate Past Chair*

Marilyn J. Schlack, President
Kalamazoo Valley Community College, *Secretary*

D. Bruce Johnstone, Chancellor
State University of New York

Johnnetta B. Cole, President
Spelman College

Thomas Gonzales, President
Front Range Community College

Robert H. Atwell, *President*
American Council on Education

CLASS OF 1991

Tomas A. Arciniega, President
California State University, Bakersfield

Flora Mancuso Edwards, President
Middlesex County College (NJ)

Stanley O. Ikenberry, President
University of Illinois

D. Bruce Johnstone, Chancellor
State University of New York

Margaret A. McKenna, President
Lesley College (MA)

Marilyn J. Schlack, President
Kalamazoo Valley Community College (MI)

Harold T. Shapiro, President
Princeton University (NJ)

Roy B. Shilling, Jr., President
Southwestern University (TX)

CLASS OF 1992

Robert L. Albright, President
Johnson C. Smith University (NC)

Marguerite R. Barnett, President
University of Houston (TX)

Johnnetta B. Cole, President
Spelman College (GA)

Lattie F. Coor, President
Arizona State University

Juliet V. Garcia, President
Texas Southmost College

Edward A. Malloy, CSC, President
University of Notre Dame (IN)

Gilbert Sanchez, President
New Mexico Highlands University

CLASS OF 1993

Shirley S. Chater, President
Texas Woman's University (TX)

Thomas Gonzales, President
Front Range Community College (CO)

Franklyn G. Jenifer, President
Howard University (DC)

James E. Lyons, Sr., President
Bowie State University (MD)

Hoke L. Smith, President
Towson State University (MD)

Niara Sudarkasa, President
Lincoln University (PA)

Michael Timpane, President
Teachers College, Columbia University (NY)

ASSOCIATION REPRESENTATIVES EX OFFICIO FOR THREE-YEAR TERMS:

Ronald K. Calgaard, President, Trinity University (TX)
Association of American Colleges

John S. Keyser, President, Clackamas Community College (OR)
American Association of Community and Junior Colleges

John E. Van de Wetering, President
State University College of New York at Brockport
American Association of State Colleges and Universities

F. Sheldon Hackney, President,
University of Pennsylvania
Association of American Universities

Joseph A. O'Hare, SJ, President,
Fordham University (NY)
Association of Catholic Colleges and Universities

Thomas Savage, SJ, President
Rockhurst Colleg (MO)
Association of Jesuit Colleges and Universities

Keith G. Briscoe, President
Buena Vista College (IA)
Council of Independent Colleges

Henry Ponder, President
Fisk University (TN),
National Association for Equal Opportunity in Higher Education

Dorothy Ann Kelly, OSU, President
College of New Rochelle (NY)
National Association of Independent Colleges and Universities

Donald C. Swain, President
University of Louisville (KY),
National Association of State Universities and Land-Grant Colleges

ASSOCIATION REPRESENTATIVES EX OFFICIO FOR ONE-YEAR NONVOTING TERM:

H. Martin Limbird, Director, Center for International Programs
Ball State University (IN)
NAFSA: Association of International Educators

Russell Edgerton, President
American Association for Higher Education

Allen P. Splete, President
Council of Independent Colleges
Washington Higher Education Secretariat

AMERICAN COUNCIL ON EDUCATION

BEST COPY AVAILABLE

ERIC Clearinghouse for Junior Colleges OCT 04 1991

62